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THE CHEMIST AND DRUGGIST

ESTAB. 1859

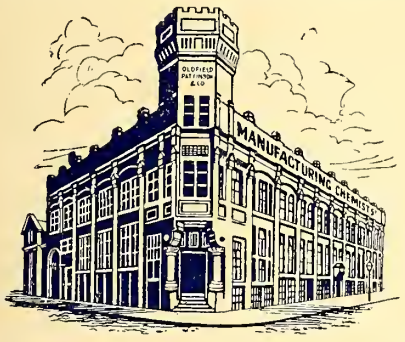
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No. 2583. AUGUST 10, 1929. Vol. CXI.



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(Free from Sugar)



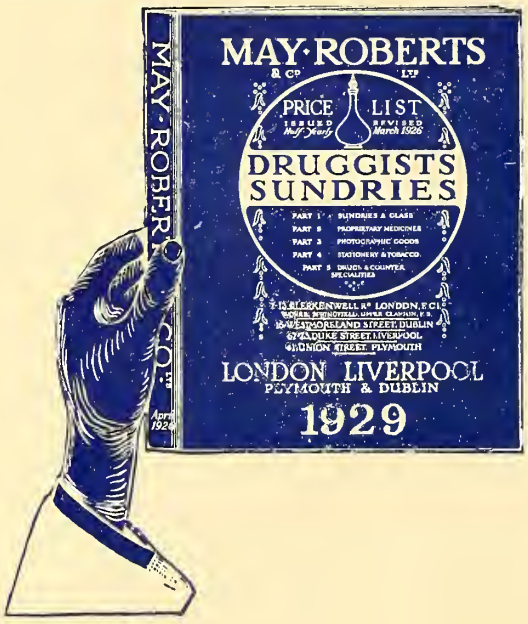
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2/6 size	1/6 size		FREE BOTTLES 2/6	1/6					
gross	gross				£ s. d.	£ s. d.	£ s. d.		
¼	¼	20% & 2½%	2	1	5 7 3	7 4 0	1 16 9	34.26%	25.50%
½	½	20% „ 3%	3	4	10 13 0	14 8 0	3 15 0	35.21%	26.03%
¼	¾	20% „ 3%	2	5	9 5 10	12 12 0	3 6 2	35.61%	26.25%
1	1	20% „ 4%	8	7	20 19 0	28 16 0	7 17 0	37.47%	27.26%
½	1½	20% „ 4%	4	11	18 6 9	25 4 0	6 17 3	37.42%	27.23%
¾	1¼	20% „ 4%	5	10	19 13 7	27 0 0	7 6 5	37.20%	27.11%
1¼	¾	20% „ 4%	10	5	22 5 0	30 12 0	8 7 0	37.52%	27.28%
1½	1½	20% „ 5%	12	12	31 0 2	43 4 0	12 3 10	39.31%	28.22%
1	2	20% „ 5%	8	16	28 8 6	39 12 0	11 3 6	39.31%	28.22%
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2	4	20% „ 6%	18	36	55 16 9	79 4 0	23 7 3	41.84%	29.49%

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Manufacturers, Bleachers, & Medicators of Surgical Dressings

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Hirst, Brooke & Hirst, Ltd.
Millgarth Mills, Leeds.
ESTABLISHED 1843

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Harehills,
Leeds.

F. C. Stock.
M.P.S.
Dispensing Chemist

30th July, 1929.

Gilmont Products Ltd.
Willing House.
Greys Inn Road.
LONDON, W.C.2.

Dear Sirs,

I am in receipt of your letter and Cheque for £100, for which I thank you very much.

Naturally I am delighted that my display has secured the first prize, and I am sure you will be interested and pleased to hear that the display increased the sale of NEW-MIX considerably and induced many customers to purchase a tube for trial.

Trusting the sales of your quality product will continue to increase to our mutual satisfaction and advantage,

I remain,
Yours faithfully.

F. C. Stock

Memo from

J. H. STANCLIFFE
M.P.S.
Dispensing and Family Chemist
THE GREEN, IDLE
Tel. No. 135

30th July, 1929.

Messrs Gilmont Products Ltd.
Willing House.
Greys Inn Road.
LONDON, W.C.2.

Dear Sirs

Many thanks for your Cheque value £50, which came to hand to-day, being second prize in the Window Display Competition.

I am pleased to inform you that since making the display the sales of NEW-MIX have been steadily increasing, and it is now one of our most popular Tooth Pastes in demand.

I feel sure that the additional sales effected during this display will result in repeat orders.

Yours faithfully,

J. H. Stancliffe

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If *you* do not already order Euthymol Tooth Paste in quantity send to-night to:

Parke, Davis & Co.,
50 Beak Street, London, W.1.

for full particulars of the special terms and display material (available for chemists only)

Maw's Page



ACTION

The fault of most business policies is that they are passive. They are brought into action only when there is trouble. In between times they are hidden away and might as well not exist for all the good they do.

This sort of policy is really a selfish sort of affair. It is constructed solely to serve the ends of the firm who introduces it. It is purposely indefinite for it must always provide a line of retreat. It is a sorry, mean, weak-kneed affair unworthy of the name of a policy.

There is nothing indefinite about the "Maw" policy because it is not intended to provide loopholes or excuses. Its purpose is to remove all possible causes of friction, not merely to provide a lubricant when the bearings get hot and the machinery breaks down.

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And when you are not actually selling goods the "Maw" policy still continues to work for you. It secures your business from the inroads of outside competition. It protects you from indiscriminate price-cutting. It sees to it that the sundries side to your business does not have to be worked on patent medicine profits, but yields a fair return for your efforts.

S. Maw, Son & Sons, Ltd.,
Aldersgate St., London,
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FLEET is the lowest-priced of the Quality Blades made in Sheffield. **Retails at 3 for 7½d.**

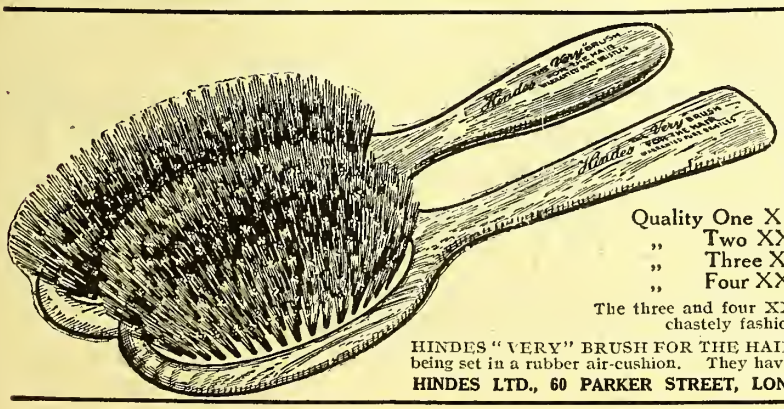
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Quality One X	Sold at 7/6d.	each.	TRADE PRICE 33⅓%
,, Two XX	,, 10/6d.	,,	
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,, Four XXXX	,, 18/6d.	,,	

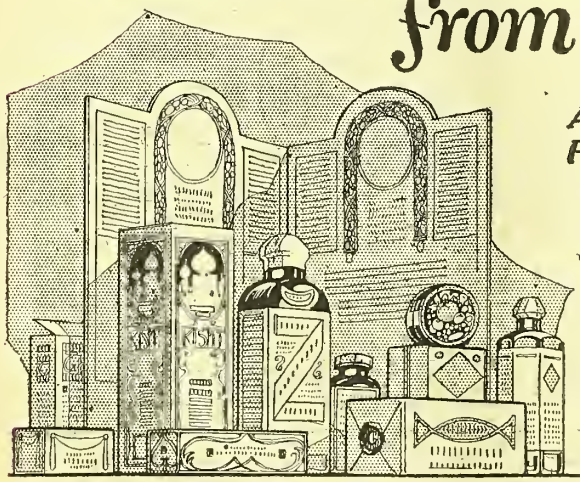
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A Concentrated Disinfectant containing 50% Cresols prepared in the Laboratories of Ayrton, Saunders & Co., Ltd., Liverpool.

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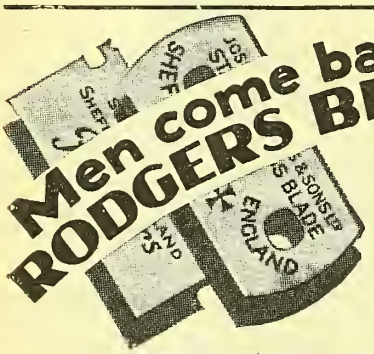


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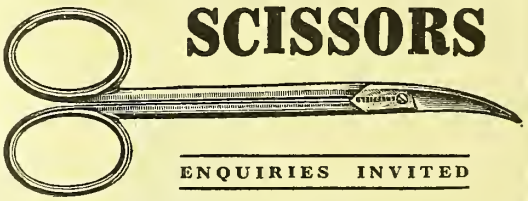


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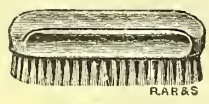
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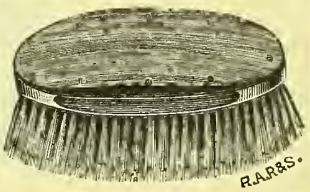
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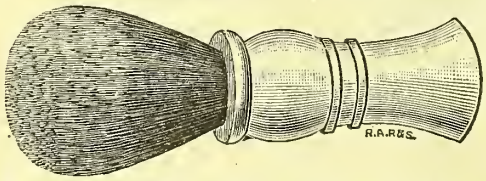
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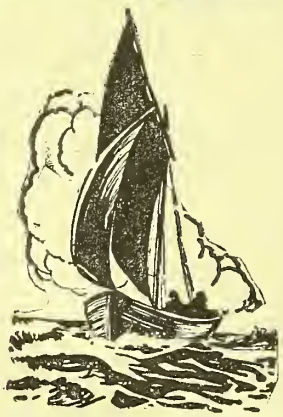
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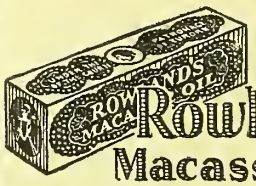
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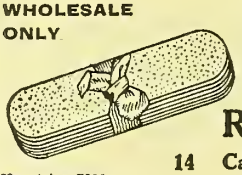
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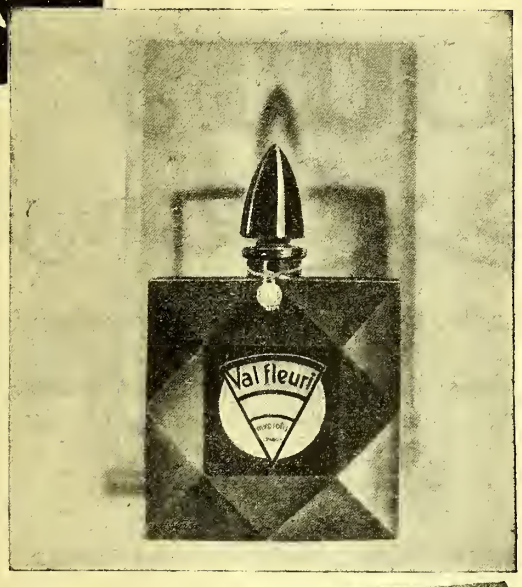
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These distinguished Perfumes are selling NOW.

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The new fashionable Perfume.
In original black cut crystal bottles, each contained in a beautiful shrine.
3 GUINEAS

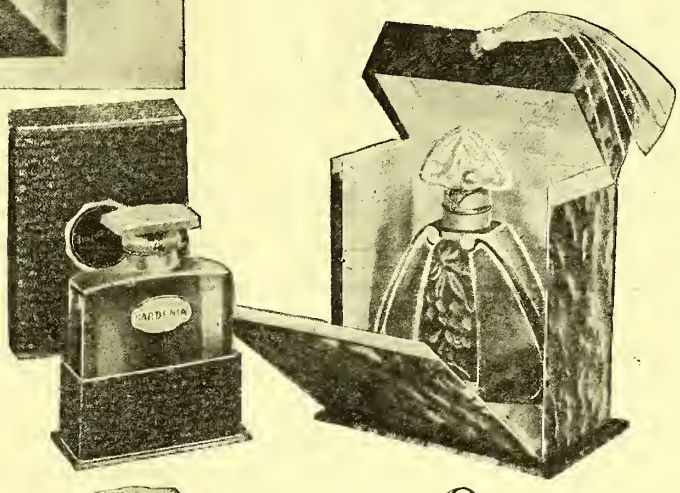
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Myosotis alone has captured the soul of the Gardenia — unblemished in its fragrant purity.

Crystal bottle in large leather box with tassel price £1 5s.

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LILY OF THE VALLEY.
MERVEILLEUSE. WALLFLOWER.

Four popular Perfumes in the Myosotis range, of distinguished charm and wonderful fragrance. Each bottle imprisons the soul of the name flower.

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The advertised line that you are asked for.

NOW ON P.A.T.A.

Samples free upon receipt of trade card or billhead.

PRICES :—Full size pot -	21/- doz.	RETAIL	2/9
Super tube -	22/- ,,	,,	3/-
Large tube -	14/- ,,	,,	2/-
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Made in four shades :

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GREY HAIRS
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TOUCH THEM UP WITH
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ANTI-ACID TABLETS, "TOXINICON" for Rheumatic diseases
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One order for Tokalon Skin Foods will be executed any time prior to August 15, 1929, subject to AN EXTRA DISCOUNT OF 25 PER CENT. This in addition to the usual Trade Discounts makes a total profit of 97.46%—thus practically you

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NOT LESS THAN 2 doz. ASSORTED

	Trade Price	Retail Value
2 doz. White Skin Food	18/-	24/-
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	29/3	
* Less 10% Display Allowance	2/11	
	26/4	
Less 25% Special Discount	6/7	
	19/9	
Retail Value of Order as above	39/-	
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YOUR PROFIT 97.46%	19/3	39/-

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Please forward Tokalon Skin Food under special "First Order" extra discount offer as under :

..... doz. Tokalon Day Skin Food (white) at 9/- per doz.
* Less 10% display allowance and SPECIAL 25%.

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I undertake to make a prominent display of Skin Food for at least 14 days.

Signed .....

Address .....

If goods are to be invoiced through wholesaler give name and address .....

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ROBINSON'S *of* CHESTERFIELD *for* CARDBOARD BOXES

ROUND · OVAL · SQUARE · FOLDING

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SALES-MAKING CARTONS

Goods well packed are half sold, and easier selling means more sales. Your own preparations attractively packed will sell considerably better.

Send for samples and prices.

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Our "VICTOR" Rubber Sponge has for many years been acknowledged to be the ideal sponge, not only for toilet use, but also for washing down motor cars, saddlery and similar purposes.

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became
Disheartened with Kotex

THEY had used a sample. Had found it to be a most dependable provider of comfort—protection and peace of mind—BUT they did not feel they could afford to spend 2s. at one time for protection during the menstrual period.

Do you remember the hundreds of thousands of samples Kotex, Limited, distributed? The full page—(coloured)—magazine advertisements? The day after day newspaper advertising? Splendid advertising it was—creating tremendous interest on the part of all women to use Kotex—but—the 2s. per packet price—formed an insurmountable wall to prevent a million women from becoming users of this excellent product.

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Please put some Kotex in your window so that women who read the advertisements will know that you stock it.

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Please take advantage of our research into the purchasing habits of women—and use the wrapped package method. Your customers will greatly appreciate your thoughtfulness.

Return to us the attached coupon if you have not already a Metal Counter Rack in your shop.

KOTEX, LIMITED,
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London, N.W.6.

Please send us your Metal Counter Rack (free of charge), and we undertake to adopt the wrapped package idea.

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Address .....

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N.B.—Have you a stock of the new 1s. packets of Kotex?



THE WORLD'S FINEST PORTABLE FOR 20/- DOWN

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Guaranteed for 2 Years.

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"PHARMACEUTICAL FORMULAS."

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Price 15/-, by post 15/9.

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42 CANNON STREET, E.C.4, and 33 NORFOLK STREET, W.C.2

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TONIC & CONDITION POWDERS

The Best tonic for all Dogs & Cats



THE enormous demand for Sherley's Tonic & Condition Powders has enabled us to reduce manufacturing costs. The saving thus effected is being passed on to the Trade in return for their co-operation in obtaining these increased sales.

6d. size	3/9 per dozen for quantities of 2 dozen and over. Less than 2 dozen, 4/- per dozen.
1/3 size	9/4½ per dozen for quantities of 1 dozen and over. Less than 1 dozen, 10/- per dozen.
2/6 size	18/9 per dozen for quantities of 1 dozen and over. Less than 1 dozen, 20/- per dozen.

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Quantities of two dozen 6d. packets, or one dozen 1/3 packets supplied on attractive cards, if desired.

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53/6



Size 17½ × 9¼ × 7, as illustrated. Solid mahogany, highly polished. Lock to lid and drawer. Check action, warning bell and secret catch. Coils 3⅞ ins. wide, 4/- doz. Buy direct from the manufacturers. Guaranteed for 5 years.

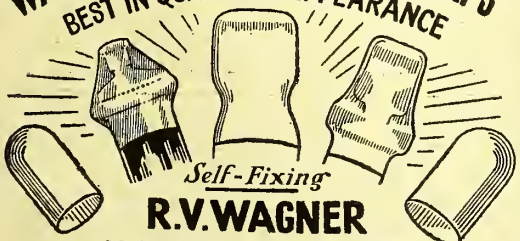
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BEST IN QUALITY & APPEARANCE



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Now that the pest of flies is here how welcome to every housewife is the means of quickly destroying them! What a great opportunity is yours of making substantial profits! Simply stock Wasp Flyband—the most effective Fly Catcher made. Stock left over will be fresh and saleable next year.

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MAKE YOUR WINDOWS ATTRACTIVE to DOG OWNERS



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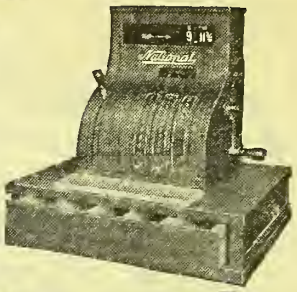
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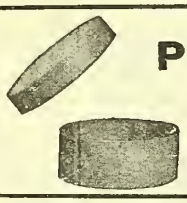
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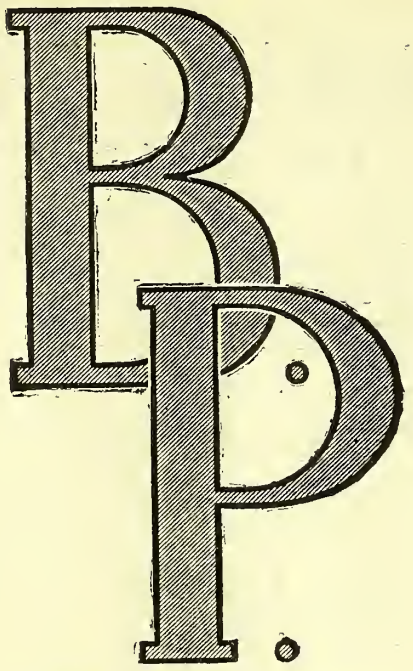
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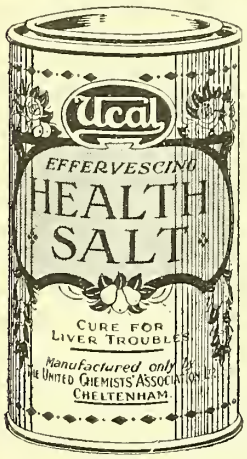
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ESTABLISHED 1859

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Business Changes

TIMOTHY WHITES (1928), LTD., have opened new premises at 38-40 Sandgate Road, Folkestone.

MR. BOWEN, chemist and druggist, has opened a pharmacy at 36 High Street, Llanbradach, Cardiff.

MR. H. W. S. WYNTER, chemist and druggist, has purchased the business previously carried on by R. P. Chantler, Ltd., at 110 Biscot Road, Luton.

MR. H. N. LEVER, chemist and druggist, Merehall Pharmacy, Bolton, is no longer carrying on a branch at 40 Deane Road, correspondence with regard to which should in future be sent to Merehall Pharmacy.

MR. HOWARD VIBERT (proprietor of Maurice & Co.), chemist and druggist, 5 George Street, Plymouth, has disposed of his premises and has transferred the prescription-books, etc., to Mr. R. S. Gollop, chemist and druggist, 183 Union Street.

BUSH, BEACH & GENT, LTD., chemical importers and agents, are removing to larger premises on August 19, when their address will be: Marlow House, Lloyd's Avenue, London, E.C.3. Telephone numbers are unchanged: Royal 7977/8/9; telegraphic address: Beafredma, Fen, London.

English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

Analytical Reports

At a meeting of a subcommittee of the Devon County Council at Exeter, on August 1, the county analyst stated that, of forty-seven sheep-dips analysed, twenty-eight were of correct strength, fourteen much too high, three rather low, and two very low. A member remarked that one of his neighbours lost several sheep after dipping, and gave practical hints as to the best method of carrying out the operation.

The medical officer of health for Coventry states in his latest annual report that eight samples of liquorice powder were taken for analysis. Of these five were genuine; three did not comply with the standard of the British Pharmacopœia, in that two of them contained an excess of sulphur and the other was deficient in sulphur. Of four samples of castor oil, two were found to have an excess acid value. The vendors were cautioned.

Reporting on samples of liniment of soap, the Warwickshire county analyst states that the composition of the articles supplied appears to be limited only by the ingenuity of the vendors. Nine samples in all were received, four official and five informal; the four formal samples and four of the informal ones were returned as adulterated. It is a common practice on the part of pharmacists to make up liniments using duty-free methylated spirit in place of the alcohol ordered by the B.P. In only one case out of the nine was any statement made. In this instance, it took the form of a label on the bottle. The price charged for similar quantities of the liniment was found to be curiously variable.

Inquests

At Bexleyheath, on July 25, the coroner investigated the death of Donald A. W. Cook, aged eighteen, who committed suicide in a copse in the district. The cause of death was stated by a medical witness to be poisoning by potassium cyanide; and Mr. T. B. Price, chemistry master at Dartford Grammar School, said that the deceased had a good knowledge of chemistry and might have obtained the cyanide from the school laboratory. A verdict was given to the effect that he was of unsound mind.

The Croydon coroner continued, on July 26, the inquest on the body of Mr. E. C. Duff (*C. & D.*, July 20, p. 77). Mr. S. A. Noble, chemist and druggist, deposed that in 1927 he sold Mr. Duff a gallon tin and a smaller tin of his weed-killer. The inquest was again adjourned. The inquest was concluded on August 6, after Sir Bernard Spilsbury had been recalled for the purpose of giving further evidence as to the physiological action of arsenic in the body. The jury returned a verdict to the effect that Mr. Duff died from acute arsenical poisoning, and that the poison was wilfully administered by a person or persons unknown. The foreman intimated that they wished to add the rider that "We consider that the chemical analysis of the organs carried out after the first *post-mortem* examination was not conducted with sufficient care." The Coroner: I am not, of course, in any way responsible for that rider. You are entitled to express your opinion, but if I may suggest, after a little more consideration, it should not go on the inquisition. I think in fairness I should say, after that rider, that in my own mind I am not satisfied what is the real reason of arsenic not being found at the first examination. The Foreman: Had arsenic been found on that first examination there might have been a possibility of saving two other deaths. The Coroner: I agree it was a very unfortunate error at the first examination. What I will say is that there was conflicting evidence as to what happened at the *post-mortem* and which body was examined first. I think you are going rather far in coming to that definite opinion that the mistake was in the chemical analysis. Professor Candy, who made the analysis after the first *post-mortem* examination, rose and, with the coroner's permission, addressed the jury. He concluded: "I do think it is a very grave thing for twelve men to charge me—after thirty years' or more reputation for care and skill in

similar analyses—with criminal carelessness, for that is what it amounts to." The Coroner (to the jury) : I think you are going rather outside your province in putting that on as a rider. I am doubtful how far I can accept it. The Foreman : It is definitely proved that in the first place no arsenic was found and also definitely proved that at a later date arsenic was found, and therefore it must have been there in the first place. The Coroner : It may have been in the body in the first place, but you have to distinguish between the different stages at which it was found, and the evidence is very conflicting as to what occurred in the *post-mortem* room. How are you going to say exactly at what stage this error occurred? You have witnesses speaking of events which took place fifteen months ago, events of everyday occurrence, and how should they remember exactly what occurred? I shall not accept that rider. You have expressed your opinion and I have expressed mine. I think that possibly later on you may be rather glad I have taken this course.

Birmingham

Bank holiday found the majority of local pharmacists closed all day; a few, however, opened in the evening for an hour or two.

On the occasion of his marriage, Mr. Stanley Robinson, chemist and druggist, has been presented by the directors of Southall Brothers & Barclay, Ltd., with a gate-legged table, and by the staff with a hall-stand and a case of cutlery.

Liverpool

The civic authorities have decided not to hold a Civic Week this year.

It is stated that there are over a dozen chemists in Liverpool who wish to dispose of their business; the explanation is "bad times."

The latest annual report of the Liverpool Chemists' Association, covering its seventy-ninth session, is a well-printed pamphlet of twenty pages, containing summaries of the doings of the Association and its offshoots, together with financial statements, rules and lists of officers and members.

Big crowds of visitors have been attracted by the Boy Scouts' World Jamboree at Arrowe Park and the Welsh National Eisteddfod at Sefton Park, and photographic business, especially, has been brisk. Several shops have displayed announcements in the Welsh language. One result of the wet weather at the Scouts' camp has been a big demand for medicine for coughs, colds, and neuralgia.

The latest annual report of the medical officer of health for Liverpool, covering the year 1928, is an octavo pamphlet extending to 244 pages and containing twenty-three insets in the shape of graphs, charts, and tables. The investigation of samples of drugs appears to have been satisfactory, as there is no record of any proceedings under this heading. The number of complaints received under the Shops Act was 452; the number of fines was 194, amounting with costs to £62 15s. 6d. In addition, there were cautions for minor infringements of the Acts. During the year twenty-four licences were issued under Section 2 of the Poisons and Pharmacy Act, 1908. Ultra-violet therapy receives mention in two sections of the report, with general satisfaction at the results. Referring to the amount of smoke emitted from domestic chimneys, Dr. Mussen has a word of praise for a fuel known as "Coalite," which, though more expensive than coal, is, he remarks, a satisfactory substitute in this respect.

Miscellaneous

FIRE.—An outbreak of fire occurred on August 5 at the premises of H. E. Hope & Co., Ltd., disinfectant manufacturers, Lower Mall, Hammersmith, London, W. The outbreak was not of a serious nature.

PETROLEUM (CONSOLIDATION) ACT, 1928.—The text of the draft Regulations for the keeping and use of petroleum spirit in certain cases (*C. & D.*, August 3, p. 132), issued under the Petroleum (Consolidation) Act, 1928, has been published (Stationery Office, 2d.). In addition to motor-vehicles, motor-boats and aircraft, four kinds of engines are mentioned in the Schedule. The Regulations prescribe methods of storage, uses of the spirit, and details as to labelling.

IRREGULAR SALE OF METHYLATED SPIRIT.—At Southend-on-Sea, on July 30, Albert Edward Davies, South Avenue, was summoned for a breach of the Spirits Act by selling methylated spirit at Thorpe Bay. It was stated that a Customs and Excise officer saw the defendant's van at Thorpe Bay, and purchased a pint of the spirit. The defendant said that methylated spirit was being sold by travelling oilmen and others, and he thought that the licence he held allowed him to sell methylated spirit from his van. A fine of £5 was imposed.

INDUSTRIAL DESIGNS COMPETITION.—The sixth annual competition of industrial designs promoted by the Royal Society of Arts has maintained its interest, and there has been an increase this year in both the number of competitors and the number of designs entered over those of the previous year, viz., 1,219 candidates and 3,669 designs, compared with 1,024 candidates and 3,126 designs. A number of the judges have commented somewhat severely on the lack of technical knowledge shown by the candidates. In connection with the question of technical requirements the committee of the Advertising Section intend to issue for the information of competitors a memorandum on poster designing, embodying hints and advice on the subject by leading practical men in this profession. This should prove of value to students and others entering for this section of the competition, as some critics complain that work submitted showing lack of technical knowledge is unsuitable for immediate commercial reproduction. A bureau of information has been opened also by the Society, for the registration of the names of those exhibitors who desire to obtain employment as designers. The information is placed at the disposal of manufacturers. A selection of designs, etc., is on exhibition at the Imperial Institute, South Kensington, London, S.W.1, until September 1.

Irish News

Brevities

Mr. L. H. Grubb, M.P.S.I., secretary of the Waterford Chamber of Commerce, narrowly escaped injury when, while motoring outside Carrick-on-Suir, his motor-car turned over.

Miss Margaret Moffett, daughter of the late Mr. Joseph Moffett, Ph.C., has been appointed sub-postmistress of Donegall Road, Belfast, in succession to her father.

During the hearing of a summons at Ballymena, against Jeannie Craig, for having made false statements to Mr. Joseph Reid, Ph.C., Mill Street, for the purpose of procuring sales of methylated spirits, Mr. J. Taylor, for the defence, said that the chemists were more to blame than these poor country people. Inspector Small: If these people give any reason to the chemist, and the chemist knows the people, he is bound to sell it to them. The defendant, against whom a previous conviction was mentioned, was fined 10s., with costs, on each summons.

Retail Pharmacists' Union

Sheffield.—A general meeting of the Sheffield and District Branch was held on August 2. Mr. F. Hindle, who was in the chair, gave a report as delegate to the London Conference on Pharmacy Week. On the motion of Mr. John Austen, it was resolved : "That this meeting approves the action of the R.P.U. in undertaking the organisation of a Pharmacy Week, and requests every pharmacist to give his utmost support to the movement." It was decided to supplement the scheme by local Press advertisements by the Branch. The secretary was instructed to ask the R.P.U. to object to the "dumping" of unordered goods on chemists. The following were elected to form the new council : Messrs. J. Austen, A. H. Culverhouse, C. P. Gilbert, C. H. Hewitt, F. Hindle, C. W. Hobson, A. Knowles, T. Medley, L. Piper, E. Preston, H. G. Williams and J. H. Wright.

The National Formulary for N.H.I. Purposes

By "Scrutator"

THIS volume has been compiled by the Insurance Acts Committee of the British Medical Association with the co-operation of the Ministry of Health and the Retail Pharmacists' Union. That such a formulary is needed is evidenced by the number of local Insurance pharmacopœias already in existence. On examination one finds that it contains, in addition to formulas covering all the usual forms in which drugs are exhibited, a mass of useful information for the panel practitioner. In the latter section are included :—

(*a*) A synopsis of the D.D.A. Regulations.

(*b*) A list of proprietary articles and of drugs and preparations of reputed analogous therapeutic effect. Nearly 200 proprietary articles are listed, the idea being to discountenance the prescribing of such when official preparations are known of equal value.

(*c*) Suggestions to ensure economy in prescribing. Incidentally it is pointed out that the maximum dose of vitamins A and D is contained in from two to three drachms of cod-liver oil, hence larger doses are both unnecessary and uneconomical.

As may be expected, the largest number of formulas given is for mixtures, no less than eighty-three being recorded. The B.P.C. has been freely drawn upon. Nearly fifty preparations are included, in addition to gargarisma chlori, which, although copied word for word from the Codex, bears no acknowledgment of its source.

The weakness of the National Formulary is, in the opinion of the present writer, the failure of the committee to carry out the precept, so admirably laid down in the preface, "that no formula bear the same title as one in the B.P. or B.P.C. unless identical therewith." It would be better to have distinctive titles for the new preparations; and to this end the following are tentatively suggested as alternatives :—

N.H.I. Formulary Name	*Suggested Name*
Lin. alb.	Lin. stimulans
Linct. diamorph.	Linct. diamorph. simpl.
Lot. acid. carbol.	Lot. A. C. dil. vel lot. antiseptic.
Mist. bismuth.	Mist. bismuth. et mag.
Mist. carminat.	Mist. stimulans vel dispersens
Mist. cascaræ	Mist. cascaræ alk. vel mist. C. et Nuc. V.
Mist. cinchon. acid	Mist. cinch. acid. phos.
Mist. colch.	Mist. colch. alk..
Neb. adrenal.	Neb. adrenal. sal.
Oc. flav. c. atropin.	Oc. hyd. flav c. atropin.
Pigment. iodi	Pigment iod. dil.
Pulv. zinc. et acid. borio.	Pulv. antiseptic.
Ung. calamin.	Ung. calamin. c. paraffin.
Ung. iod. denigres.	Ung. iod. decol. vel ung. paraff. iodisat.
Vapor eucalypti et pini	Vapor pini co.

Collyr. hyd. perchlor. is approximately and mist. alb. exactly double the strength of the corresponding B.P.C. preparation : therefore why not describe them as such? For lin. aconiti co. the N.H.I. formula is unsatisfactory. The following would be an improvement :—

Lin aconiti meth., 2; lin. bellad. meth., 2; chloroform., 1; indust. meth. spirit, 1. Title suggested: Lin. aconiti co. dil.

Referring to Schedule 1, it will be seen that garg. acid. tannic., gutt. physostig., oc. acid. bor. and pigment. iodi co. differ but slightly from the B.P.C. preparations of the same name. The percentage formulas of the B.P.C. have been rejected and simplified working formulas devised on the basis of the arbitrary quantities to be dispensed (see Schedule 2). A principle is at stake here.

Schedule 1

List of Preparations bearing a B.P. or B.P.C. Title but differing therefrom in composition :—

Page	*Name*	
39 ..	Collyr. hydrarg. perchlor.	1 of liq. hydrarg. perchlor. in 3 (B.P.C. 1 in 5.7)
41 ..	Garg. acid. tannic.	.. 1 of glyc. acid. tannic. in 8 (B.P.C. 1 in 10)
44 ..	Gutt. physostigmin.	.. 0.91% (B.P.C. 1%)
47 ..	Lin. aconiti co. ..	.. Contains lin. chloror. vice chlorof.
	Lin. alb.	.. Liq. ammon. fort., 1 Ol. terebinth., 1 Ol. gossyp. sem., 6
48 ..	Lot. acid. carbol...	.. Acid. carbol. liq., 1 Aq., 63 Coloured with trypan blue
51 ..	Mist. alb. ..	.. Double strength of B.P.C.
52 ..	Mist. bismuth. ..	.. Bismuth. carb., gr. 5 Sod. bicarb., gr. 10 Mag. carb. levis., gr. 10 Aq. menth. pip., ad fl. oz. ss.
54 ..	Mist. carminat. ..	...Sod. bicarb., gr. 10 Mag. carb. levis., gr. 5 Tr. carminat. (B.P.C.), ℥5 Aq., ad fl. oz. ss.
	Mist. cascar. ..	.. Ext. cascar., sag. liq., ℥20 Ammon. carb., gr. 2 Tr. nucis vom., ℥5 Tr. bellad., ℥3 Glycerin., dr. ss. Aq., ad fl. oz. ss.
	Mist. cinchon. acid.	.. Ext. cinchon. liq., ℥10 Acid. phos. dil., ℥10 Glycerin., ℥10 Aq., ad fl. oz. ss.
	Mist. colchic. ..	.. Pot. bicarb., gr. 15 Sod. sulph., gr. 10 Fluidext. colch. (U.S.P.), ℥3 Aq. menth. pip., ad fl. oz. ss.
63 ..	Neb. adrenal. ..	.. Sol. adrenal. (1 in 1000), ℥45 Sol. sod. chlor., ad fl. oz. j.
64 ..	Oc. acid. boric. ..	.. 4.17% (B.P.C. 4%)
	Oc. flav. c. atropin.	.. Atropin. *pur.*, gr. ¼ Hyd. oxid. flav., gr. 2 Paraffin. moll. *alb.*, ad dr. j.
65 ..	Pigment. iodi ..	.. Iodi, gr. 22 Pot. iod., gr. 13 Aq. dest., ℥48 Isopropyl alcohol, ad fl. oz. j.
	Pigment. iodi co. (Mandl)	Pot. iod. 4.16% (B.P.C. 5.5%) Ol. menth. pip. 1.04% (B.P.C. 0.75%)
70 ..	Pulv. zinc. et acid. boric.	Pulv. talc. and B.P.C. pulv. zinci, etc., partes æquales
75 ..	Ung. calamin. ..	.. Calamin. præp., gr. 80 Aq., dr. j. Paraffin. moll. fl., ad oz. j.
76 ..	Ung. iodi denigres.	.. Iodi, gr. 24 Ol. arachis, ℥48 Paraffin. moll. flav., ad oz. j.
79 ..	Vapor eucalypti et pini ..	Ol. eucalypti, ℥15 Ol. abietis, ℥15 Mag. carb. levis., gr. 15 Aq. camph., ad fl. oz. j.

Schedule 2

Quantities to be dispensed unless otherwise ordered :—

Capsulæ	24	Lotiones ..	fl. oz. 8
(Amyl nit. and filicis, 6)		Misturæ	fl. oz. 8
Collunaria ..	12	Nebulæ	fl. oz. 1
Collutoria ..	fl. oz. 8	Oculenta	dr. 1
Collyria	fl. oz. 6	Pastæ	q.s.
Emulsiones ..	fl. oz. 8	Pigmenta ..	fl. oz. 1
Gargarismata ..	fl. oz. 8	Pilulæ	q.s.
Glyc. thymol. co.	fl. oz. 4	Pulveres	oz. 2 (apoth.)
Guttæ auribus ..	fl. oz. 1	Pulv. tannic. co...	oz. 1 (apoth.)
Guttæ ophth. ..	fl. dr. 2	Syrupi	fl. oz. 2
Haustus	fl. oz. 1	Tablettæ	q.s.
Injectiones ..	fl. oz. 12	Unguenta ..	oz. 1 (apoth.)
Inj. vaginales ..	oz. 1 (solid)	Vapores	fl. oz. 1
Linct	fl. oz. 2		
Linimenta ..	fl. oz. 2		

Schedule 3

Errata

P. 21, last line, Bismouth for bismuth.

P. 33, line 7, C.B.P. for B.P.C.

P. 60, Mist. pot. iod. and mist. quin. sulph. ad fl. oz. (½ omitted).

P. 64, Oc. flav. c. atropin. and oc. hydrarg. ox. flav.—paraffin. moll. alb. (flav. presumably intended).

P. 71, Syr. glycerophosph. co. B.P.C. Sacch. purif. gr. 384 (should be gr. 350).

Schedule 4

Preparations using U.S.P. Fluid extracts

P. 44, Haust. bromid. et chloral.—Fluidext. hyosc. (U.S.P.).

P. 54, Mist colchic.—Fluidext. colchic. (U.S.P.) sem.

P. 61, Mist. seneg. ammon.—Fluidext. seneg. (U.S.P.).

Legal Reports

Extension for Patent.—In the Chancery Division of the High Court, London, on July 25, Mr. Justice Luxmoore heard an application by the British Thomson-Houston Co., Ltd., for an extension of the period for a patent relating to *x*-ray tubes. The application was opposed by Newton & Wright, Ltd., Wigmore Street, W., Cuthbert & Andrews, Red Lion Street, W.C., and A. E. Dean & Co., Leigh Place, W.C. Sir Arthur Colefax, for the applicants, said this invention was called a Coolidge *x*-ray tube and belonged to the General Electric Co. of the United States, who communicated the patent to the applicants. The patent expired in June last. His lordship granted an extension for one year.

Registered Druggist Fined for Compounding.—In the Dublin District Court recently, Mr. John P. O'Connor, R.D., Dolphin's Barn Medical Hall, was summoned on four counts for compounding and dispensing medical prescriptions. He pleaded "Guilty." Mr. W. C. Meeke, solicitor, who prosecuted for the Pharmaceutical Society, said that his clients regarded the complaint very seriously. The labels which the defendant placed on bottles contained the words, "Prescriptions carefully compounded." Mr. E. H. Burne, solicitor for the defence, said that these labels were printed by mistake, and his client had blotted out these words from the labels, but one or two got on bottles inadvertently. As a registered druggist, he was permitted to sell the four components of the prescription separately. The justice said it was a very dangerous thing for an unqualified man to compound a medical prescription, and imposed a fine of £5, with £2 2s. costs, on each of the four summonses.

Failure to Enter "Dangerous" Drugs.—At Hull Police Court, on August 6, Mr. John Caldwell Fergusson, L.R.C.P. Irel., L.R.C.S. Irel., Brunswick Street, Oxford Road, Manchester, was summoned for failing to keep a register and to enter therein the true particulars of 1 lb. tincture of opium obtained by him. There was a second summons in respect of 6 oz. of liquor morphinæ hydrochloridi. He pleaded "Not guilty." Mr. A. Pickard, assistant solicitor to the Hull Corporation, stated that on April 17 Dr. Fergusson began duty as *locum tenens* for a local medical man, during whose absence he ordered these items from a local chemist. When the doctor left his surgery there was a bottle containing 8 oz. of tincture of opium, ½ oz. of morphine hydrochloride solution, and two, if not three, tubes each containing twenty morphine tablets. When he returned there was none of these left in the surgery. No entry was made of those two purchases, though there were fifteen entries in the day-book of drugs used. The defence produced a book belonging to the defendant containing particulars of the purchase of the drugs. Dr. Fergusson stated that his own register had been inspected and passed as fulfilling the requirements of the Regulations. All "dangerous" drugs he had purchased were entered in that register, and he considered he had no other book to keep, because he had never dispensed any drugs above the strength laid down by the Regulations. A fine of £10 10s., including costs, was imposed.

The Use of a Medical Title.—At Marlborough Street Police Court, London, July 9, Mr. Cancellor delivered a reserved decision in a case in which Lieutenant-Colonel John William Kynaston, Langham House, Regent Street, W., was accused of wilfully and falsely pretending to be a doctor of medicine, and of wilfully and falsely using the title "M.R.C.S. Eng." The case had been argued at two previous sittings of the Court. Colonel Kynaston claimed that the Royal College of Surgeons had no right to demand the return of his diploma, that he still retained it, and that he was still entitled to use the title and to practise. He said that he had persistently disclaimed being on the Medical Register. The magistrate said he found:—(1) That the defendant did not wilfully and falsely pretend to be a doctor of medicine, and therefore he dismissed the first summons. (2) That he committed a breach of the statute alleged in the second summons, because he must have known that the use of the letters "M.R.C.S." in his advertisement would lead readers of it to believe that he was still a member of the College. But there were several extenuating circumstances, and the second summons was accordingly dismissed with a caution.—In the King's Bench Division of the High Court, on July 26, judgment was given in a case in which Lieutenant-Colonel Kynaston had applied for a mandamus requiring the General Medical Council to delete from the Register all records of the penal removal of his name. Mr. Montgomery, K.C., and Mr. D. C. Bartley showed cause for the Council; Mr. L. M. Minty and Mr. A. E. Sockett supported the rule. Colonel Kynaston alleged that, having applied to have his name removed from the register at his own request in March 1922, at which time there were no charges of any sort preferred against him, the Council did not so remove his name, but inquired into charges made in April 1922, alleging that certain publications of Colonel Kynaston's were advertising and amounted to infamous conduct in a professional capacity. He complained that at the hearing Sir George Newman took part in the decision. A demand in May 1929 for reinstatement was not complied with. Mr. Montgomery read an affidavit by the Council's registrar denying that Sir George Newman took any part in the deliberations and voting of the council. At the conclusion of the arguments, the Lord Chief Justice, in giving judgment, said that it had been urged with apparent seriousness that, as long as no proceedings had been taken against him, a practitioner, being minded to do acts which would clearly invite proceedings, was nevertheless entitled to have his name removed, and, having completed his infamous conduct, to have it restored, and so, in an infinite series, terminable only with his life, to be on and off the Register as he pleased. No small part of the argument had been in fact an invitation to review the conclusions of the Council. It was well settled that the Court had no such power. The rule ought to be discharged. Mr. Justice Avory delivered judgment to the same effect, and Mr. Justice Branson concurred.

New Companies
and Company News

P.C. means Private Company and R.O. Registered Office.

Leisler, Bock & Co., Ltd (P.C.).—Registered in Edinburgh on July 30. Capital £10,000 in £1 shares. Objects: To carry on the business of merchants, importers, and exporters of goods, wares, and merchandise, etc. The directors are: F. A. Rottenburg, 7 Kew Terrace, Glasgow, merchant; and D. Jeffrey, 50 Kersland Street, Glasgow, clerk. R.O.: 55 West Regent Street, Glasgow.

Billowzone (1929), Ltd. (P.C.).—Capital £1,000. Objects: To acquire the business now carried on by Colonel A. W. Pryce Jones at East Barnet, as proprietor and manufacturer of medicated bath salts known as "Billowzone." The permanent directors are: Col. J. B. Stracey-Clitherow, Hotham Hall, Yorks, and T. Brooks, Whyteholme, Hadley Wood, Herts. R.O.: 28 Bedford Row, W.C.1.

L. J. Collis & Co., Ltd. (P.C.).—Capital £1,000. Objects: To carry on the business of consulting, analytical, manufacturing, pharmaceutical and general chemists, herbalists and seedsmen, drug merchants, etc. The subscribers are L. J. Collis, 2 Parkhurst Road, Bexhill-on-Sea, chemist; and Miss G. E. M. Smith, Tregenna, Wickham Avenue, Bexhill-on-Sea, chemist. R.O.: 34 St. Leonards Road, Bexhill-on-Sea.

Trent Oil Products, Ltd. (P.C.).—Capital £7,000. Objects: To adopt an agreement with A. J. Flint, J. W. Roberts, G. W. Smith and the Dalton Motor Spirit Co., Ltd., for the purchase of Gunness Wharf, Brumby Rural, Lincs, and to carry on the business of producers, refiners, storers, suppliers and distributors of petroleum and petroleum products, etc. The directors are C. Holdsworth and G. W. Smith. R.O.: Gunness Wharf, Brumby Rural, Lincs.

Chemical Concessions (London), Ltd. (P.C.).—Capital £1,000. Objects: To carry on the business of manufacturers, producers and sellers of disinfectants, dyes, acids, alkalis and all other such chemical and natural compounds and by-products capable of being used for

disinfecting, sanitary, hygienic and all other purposes, etc. The subscribers are: R. L. Pavitt, 95 Talgarth Mansions, W.14, buyer, and Edna M. Green. R.O.: 14 New Bridge Street, E.C.4.

LEWIS & PEAT, LTD., have declared a second interim dividend of 2½ per cent. on the ordinary shares, payable forthwith.

SANGERS, LTD.—The report for the year ended March 31 last states that the profits amounted to £80,259, which are in excess of the average profits set out in the prospectus by £9,672. The whole of the preliminary expenses have been written off out of the share premium account, and a sum of £50,000 has been applied in reduction of goodwill. The balance of the share premium account, £15,386, is carried forward as a reserve. After making provision for income-tax, and other adjustments, there remains £20,459 earned since the incorporation of the company, which the directors have decided to carry forward. A dividend for the half-year to July 31, 1929, on the Seven-and-a-Half per Cent. Cumulative Preference shares and an interim dividend of 7½ per cent. (actual) on the Ordinary shares on account of the year ending March 31 next have been declared.

ANDREWS LIVER SALT.—In further reference to the statement in last week's *C. & D.* (p. 135) that an arrangement has been concluded by which Scott & Turner, Ltd., manufacturers of Andrews Liver Salt, will in future be associated with Household Products, Inc., of New York, Mr. Philip Hill, chairman of Beecham's Pills, Ltd., said to a "Daily Mail" reporter:—

I am surprised, as I had informed Messrs. Scott & Turner that if the business was in the market I was prepared to buy it on behalf of Beecham's Pills, Ltd. Last year I had a similar surprise when I heard that a controlling interest in Eno's Fruit Salt had been sold to Mr. Harold Ritchie, of Toronto. I had also intimated to the people connected with Eno's that I was willing to buy at any time.

I am all in favour of employing American capital in English concerns, but it is very regrettable that the dominating control in these businesses should pass to America. English capital is fully alive to the possibilities of developing world trade by mergers and amalgamations, and I am sure that, given the opportunity, we would be prepared to pay quite as much as America for any solid business.

Voluntary Liquidation

A. J. Ancliffe and Co., Ltd., Trafalgar Place, Stoke, Devonport, chemists and druggists. In pursuance of the provisions of the Companies (Consolidation) Act, 1908, a meeting of the creditors was held on July 18 at the offices of Mr. Parkin S. Booth, accountant, Kimberley House, Holborn Viaduct, E.C. It was reported that the liabilities amounted to £589 6s. 4d., and the assets, after allowing £25 for preferential claims, were £437 10s., or a deficiency of £151 16s. 4d. The assets consisted of: cash in hand, £2 10s.; stock in trade, £300; trade fixtures and fittings, £150; and book debts, £10. The company was formed in September 1926 with a nominal capital of £1,000 in £1 shares. The directors were Mr. H. J. Gay and Mr. A. J. Ancliffe, who had taken no active part in the business since March 1928. In that year Mr. Ancliffe disposed of his shares to Mr. Gay for £80. The turnover had been of an average of £20 a week, and liquidation had been decided upon with a view to the business being conducted and sold as a going concern. It was decided that the voluntary liquidation should be continued with Mr. Booth as liquidator with a committee of inspection. The following are creditors:—Ancliffe, A. J., £25; Butler & Crispe, £79; Evans, Gadd & Co., Ltd., £67; Ellis, Son & Paramore, £15; Harker, C. R. Stagg & Morgan, Ltd., £41; Newbery, F., & Sons, Ltd., £140; Sangers, Ltd., £25.

Gazette

Bankruptcy Acts

RECEIVING ORDER AND ADJUDICATION

AIRTON, W., 287 St. Sepulchre Gate, Doncaster, drug-store proprietor.

Stock Exchange Prices

£1 Shares unless otherwise stated	Dec. 31, 1928	June 28, 1929	July 31 1929
	s. d.	s. d.	s. d.
Allen & Hanburys, 7% Prefd. Ord.	21 6	21 9	21 6
Amalg. Dental Co., 8% Prefd. Ord.	21 0	21 3	21 0
„ „ Deferred 5s. ..	5 9	5 9	4 9
Apollinaris and Johannis, Ord. £1 ..	13 9	11 6	10 9
Ayrton, Saunders & Co., 7½% Pref.	15 0	15 6	15 6
Beechams Pills, Deferred 1s. shares	5 4½	4 0	3 6
Benger's Food, Ord.	38 0	37 0	36 0
Boake(A.),Roberts&Co.,5%Pref. £10	£7	£7½	£7½
Boots Pure Drug, Ord.	138 9	143 0	140 0
Boots Pure Drug, 7% "A" Prefd. Ord.	23 7½	23 6	23 6
Boots Cash Chemists (Southern), 6% "A" Pref.	21 7½	21 6	21 6
Borax Consold., Defd. Ord.	20 3	15 6	14 0
Bovril, 6% Pref.	22 9	21 6	21 6
„ Ord.	24 9	23 6	22 6
„ Defd.	40 0	40 0	39 6
British Cyanides, Ord., 2s. shares ..	5 7½	3 10½	3 1½
British Drug Houses, The, Ord. ..	23 0	26 9	26 9
British Oil and Cake Mills, Ord. ..	32 0	31 6	31 3
British Oxygen, Ord.	32 6	37 6	38 0
British Photo. Indus., 6% Cum. Pref.	15 9	13 9	14 6
Bush (W. J.) & Co., 5% Pref. £5 ..	67 6	65 0	70 0
Cadbury Bros., 6% Pref.	23 0	23 0	23 0
Callard, Stewart & Watt, Ord. ..	38 9	36 3	36 3
Crosfield (Joseph) & Sons, 6½% Pref.	21 3	21 0	20 9
Dubarry Perfumery, Ord. 1s. ..	9 6	9 6	8 0
„ „ 7½% Pref. ..	20 6	20 6	20 3
Eastman Kodak Com.(no nom. value)	$187	$181	$198
Evans Sons Lescher & Webb, Ord. 6s. 8d. shares	3 9	4 0	4 0
„ „ 6% cum. part. Pref.	4 9	4 9	4 9
Field (J. C. & J.), Ord.	12 6	13 6	13 6
Gossage (William), 6½% Pref. ..	21 0	21 3	20 9
Grout & Co., Ord.	30 0	27 6	26 3
Heppells, 7% cum. partic. Pref. ..	16 0	14 6	13 6
Hodders, Ord. 1s.	1 3	1 1½	1 1½
Idris & Co., "A" Ord.	21 0	20 7½	20 0
Ilford, Ltd., Ord.	47 6	50 0	50 0
„ 6% Pref.	19 6	20 3	20 6
Imperial Chemical, 7% Pref. ..	26 6	25 3	25 0
„ „ Ord.	39 0	36 9	34 3
„ „ Defd. 10s. ..	14 3	14 6.	13 6
Internat. Nickel Com. (no par value)	—	$54	$52½
International Proprietaries (Eno) (no par value)	—	$39⅞	—
Intern. Sponge Importers % Pref.	10 0	6 3	7 6
Kent (G. B.) & Sons, 5½% Pref. ..	11 3	10 0	10 0
Knight (John), 25% Prefd. Ord. ..	71 3	70 7½	67 6
Laporte (B.) & Co., Ltd., Ord. ..	11 6	16 3	17 6
Lever Bros., Ltd., 7% Pref. ..	22 9	22 4½	22 4½
„ „ 8% Pref. ..	23 0	22 10½	22 6
„ „ 20% Prefd. Ord. 5s.	12 6	12 3	11 10½
Liebig's Ext. of Meat, Ord. £5 ..	£17	£17	£16½
Mellin's Food, 6% Pref.	12 6	12 6	8 9
Nathan (Joseph) & Co., 7% Pref. ..	17 0	17 3	17 0
„ „ „ 8% Prefd. Ord.	8 0	7 3	7 3
National Drug and Chemical Co. of Canada, 6½% Pref.	6 3	6 3	4 6
New Transvaal Chemical Co., 6% Pref.	20 0	19 6	19 6
„ „ „ 8% Pref.	23 9	22 6	22 6
Salt Union, Ord.	47 6	38 9	40 0
„ Pref.	35 0	33 9	33 0
Sangers, Ord. 5s.	—	7 9	8 0
"Sanitas," The, Co., 9% Pref. ..	26 6	25 0	25 0
Sanitas Trust, 10% partic. Pref. ..	24 0	24 0	24 0
Schweppes, Ltd., Ord.	32 0	30 6	30 6
„ „ Defd.	35 9	37 6	36 6
Smith (Stephen) & Co., Ord. 5s. ..	7 9	7 3	7 6
Solidol Chem. Co., Ord. 1s.	2 6	0 9	0 9
Southall Bros. & Barclay, Ord. ..	96 0	113 9	112 6
„ „ „ 5% Pref.	19 6	19 3	19 6
Spratt's Patent, Ord.	57 6	55 0	54 0
Stevenson & Howell, 6½% Cum Pref.	20 0	20 0	20 0
Taylors Cash Chemists(Lon.) 1s.Defd.	—	2 4½	2 6
Taylors (Cash Chemists) Trust, 7½% Cum. Pref. Ord.	20 9	21 9	22 0
„ „ „ 1s. Defd.	6 3	4 4½	4 6
United Glass Bottle Man., 6% Mt. Deb. Stk., £100	£96	£96	£95½
Venesta, Ltd., Ord.	11 9	16 0	16 3
„ 7% Pref.	16 3	16 9	16 6
Veno Drug Co., 8% Pref.	19 0	19 0	18 9
Virol, Ltd., Ord.	95 0	87 6	87 6
„ 7% Pref...	22 6	22 6	22 0
White (A. J.), Ltd., Ord. 10s. ..	11 3	11 9	11 3
White (Timothy), 7½% Prefd. Ord.	21 0	22 0	21 6
„ „ 1s. Defd. Ord. ..	3 6	3 0	3 0
Wright, Layman & Umney, 6% Pref.	20 0	20 0	20 0

Pharmaceutical Society of Great Britain

Council Meeting

A MEETING of the Council was held at 16 Bloomsbury Square, London, W.C.1, on August 7, Mr. L. Moreton Parry (president) in the chair. Mr. Neathercoat was the only absent member.

ELECTIONS AND RESTORATIONS

One hundred and seventy persons were elected members of the Society, and sixteen as student-associates. A number of persons were restored to the Society, but none to the Register. The registrar reported that 100 persons had been registered as apprentices or students.

BY-LAWS AMENDMENT

The PRESIDENT moved the third reading of the amendments to the by-laws; the VICE-PRESIDENT seconded, and they were confirmed.

HERBARIUM COMPETITION

MR. E. M. HOLMES, the examiner in connection with the Herbarium Competition, reported that only one herbarium had been entered, and it was such that he regretted he did not feel justified in recommending it for any prize.

The Council accordingly decided that no award should be made this year.

The PRESIDENT proposed, and the VICE-PRESIDENT seconded, that a letter of thanks be sent to Mr. Holmes, and this was agreed to.

BRITISH PHARMACEUTICAL CONFERENCE

The following letter, dated July 22, from Mr. V. E. Hanna, local secretary of the Dublin meeting of the British Pharmaceutical Conference, was read :—

DEAR MR. LINSTEAD,

It is with very great pleasure indeed I received your letter of the 16th inst., intimating that at the last meeting of the Council of the Pharmaceutical Society of Great Britain it was decided to send me a special letter of thanks and appreciation for my work as local secretary of the recent Conference.

I need scarcely say that I greatly appreciate such an expression from such a body, but to be quite candid with you our friends from across the water have been exceptionally liberal in their thanks for the efforts which we put forth to make the Conference of 1929 outstanding and memorable. When we began this work over here we understood that we were considerably handicapped by being so far away from the usual Conference centres, not to mention the immense volume of water between us. We therefore left no stone unturned to induce our friends in Great Britain to risk the journey and come and see us for themselves.

We had an exceptionally good Press all through, and in the end our friends rose to the occasion in a manner we never anticipated, and since the conclusion of the Conference I believe every member that attended has written in to one or other of us expressing their great appreciation of the royal time they appear to have had. As a final word on this fixture, I would ask our friends not to compare Dublin 1929 with any Conference that has been held in the past, for in our case we had the whole country behind us, from the Governor-General right down to the smallest chemist, and they backed us up all through in a right royal fashion. Please indicate to your president and Council how greatly I appreciate your letter, and that I truly valued the opportunity of being a spoke in the 1929 wheel, which moved so rapidly and smoothly.

BRITISH PHARMACOPŒIA COMMISSION

DR. C. H. Hampshire, secretary of the Pharmacopœia Commission, wrote to the secretary of the Pharmaceutical Society as follows :—

Your letter of the 18th inst. was read to the Commission at their last meeting, and I was directed to express their thanks to the Pharmaceutical Society of Great Britain for the offer to place the Codex Research Laboratory at the disposal of the Commission and to give facilities to a research worker appointed by the Commission to work there.

The Commission accept the offer, and will gladly make use of the facilities which will thus be afforded for investigations in connection with the revision of the British Pharmacopœia. The Commission are much indebted to the Pharmaceutical Society for this expression of their readiness to afford assistance in the work of revision.

EDUCATION COMMITTEE

The report submitted by the Education Committee showed that several schools had been approved for the teaching of subjects in connection with the Preliminary Scientific examination. At the request of the Council the Committee had considered what alterations might be made in the regulations relating to scholarships and prizes.

It was considered that the Council prizes examination should be transferred from April to August, a more convenient date for the candidates. With regard to the conditions of entry for scholarships examination, the Committee stated that under the present regulations a student who was in his first year of the Ph.C. or Pharmacy Degree course and desired a scholarship to help him through his second year could obtain an award, and such a candidate with his more advanced knowledge had a decided advantage over a candidate who intended to take the Chemist and Druggist course and consequently had not gone beyond the Preliminary Scientific stage. It therefore appeared to be desirable to preclude students who had commenced the course for the Ph.C. or Degree, and also, although there was little likelihood of such persons wishing to enter, students who had commenced the Chemist and Druggist course. The Committee therefore recommended that the alterations suggested in the report be adopted, and that the Committee be authorised to draft new regulations accordingly. The report was adopted.

BENEVOLENT FUND COMMITTEE

The report of this Committee showed that fourteen applications had been considered, and grants made or recommended ranged from £5 to £39. The three months' summary of the Committee's work showed that they had dealt with twenty-two cases, making grants in respect of twenty, totalling £484. The following special contributions were announced :—Western Pharmacists' Association, £10 10s.; "Nosmas," £5; Oxford and District Branch, £2 10s.; J. T. Davies (Chemists), Ltd., £1 13s.; W. H. Dixon & Sons, £1 1s.; H. Mitchell & Co., 15s. 5d.

MR. KEALL (chairman of the Committee) said that although the list was shorter than usual the Committee welcomed the contributions just as warmly. He paid a tribute to Mrs. Freke, who had attended the prize distribution at the school at which the Council had a number of orphans at Watford.

MRS. FREKE, speaking of her visit, said she was pleased to find that a number of their children had succeeded in winning prizes, and spoke in high praise of the address given on the occasion by Mr. Baldwin. The report was adopted.

WAR AUXILIARY BENEVOLENT FUND

The Committee of this fund reported that they had received eight applications during the month, and recommended grants ranging from £40 to £175. The quarterly report showed that twelve cases had been dealt with, and eight grants, amounting in all to £182, had been made.

MR. BEARDSLEY, proposing the adoption of the report, said the list was exceptionally heavy. The report was adopted.

FINANCE COMMITTEE

The financial statement showed that receipts since the last meeting, including a balance of £42, amounted to £18,306 17s. 2d., comprising the following items :—Subscriptions, £634 14s. 6d.; registration fees, £189; examination fees, £10 6s.; certificates of qualification, £6 6s.; restoration fees, £2 2s.; School of Pharmacy, £36 10s.; Pharmacological Laboratories, £285 12s.; penalties, £166 12s. 4d.; "Pharmaceutical Journal," advertisements, etc., £1,144 14s. 10d.; Quarterly Journal, £17 19s.; "Pharmaceutical Pocket Book," £13 11s.; Pharmaceutical Press publications, £15 5s. 4d.; Registers, £6 16s. 9d.; B.P. Codex, £39 5s. 9d.; "Forensic Pharmacy," £20 12s. 5d.; interest on investments, £331 15s. 9d.; wage deductions for F.S.S.U., £10 15s. 3d.; sundries, £32 18s. 3d.; transferred from deposit account, £15,300. Payments ordered at the last meeting amounted to £8,267 19s. 2d., and £10,000 had

been invested in 5 per cent. War Stock, leaving a balance of £38 18s. 10d. The balances on the other accounts were :—Benevolent Fund (current account), £28 7s. 9d.; Benevolent Fund (donation account), £36 17s. 8d.; War Auxiliary Benevolent Fund (adverse balance), £396 7s. 9d.; Orphan Fund, £54 8s. 9d. The report recommended that accounts amounting to £11,154 14s. 10d. be paid, and that the action of the secretary in making payments amounting to £1,394 18s. 5d. be approved. The report was adopted.

ORGANISATION COMMITTEE

The Organisation Committee reported that they had considered whether an evening meeting would be suitable for the unveiling of the memorial to Sir William Glyn-Jones should the Council contemplate it, but decided that the evening would not be the best time.

The Committee had considered whether improvements were possible in the arrangements for the delegates' meetings in 1930. They felt that one subject for each meeting was sufficient, and that subjects need not be decided upon definitely until about March next. They were, however, asking branches to keep a date in that month free for a private discussion of the subjects, so that delegates might obtain a general idea of the feeling of the branch.

This was all the public business.

Confirmation of By-Laws

A special meeting to confirm the new by-laws (*C. & D.*, July 13, p. 63) was held at 17 Bloomsbury Square on August 7, the president (Mr. L. Moreton Parry) in the chair. The secretary having read the notice convening the meeting, the PRESIDENT, in a brief speech, moved the confirmation of the by-laws and explained their purport. The VICE-PRESIDENT seconded and the resolution was carried unanimously. There was a small attendance.

Branch Meetings

Cardiff.—A meeting was held at the Royal Hotel, on July 25, Mr. Eason in the chair. The chairman said that the British Pharmaceutical Conference had been invited to hold its next meeting in Wales in 1930, and it was considered that Cardiff would be the most convenient and acceptable centre. In addition to its situation, Cardiff was in a position to give the necessary facilities in the shape of large halls, with adequate hotel accommodation. There were in the surrounding area many places of interest, which could be utilised both for pleasure and education, and Cardiff was very accessible from all parts of the country. They must have the hearty co-operation of the districts outside. Mr. J. D. Jenkins was appointed *Chairman;* Mr. S. W. Hague, *Vice-Chairman;* Mr. James Murray, *Secretary*; and Mr. S. B. Eason, *Treasurer.* It was decided that all associations outside the Cardiff area should nominate their own representatives on the Executive, and the secretary was instructed to communicate with all associationss in Wales. A vote of thanks to Mr. John Gower (Llanelly) and the three members of the Newport Association for their moral support in attending was passed.

Associations' Meetings

Belfast.—At a meeting of the Chemists' and Druggists' Society of Ireland, held on July 25, at 11 Waring Street, Belfast, a letter was read from Mr. W. T. Gordon thanking the Committee for their letter of sympathy on the death of his mother. Mr. Storey proposed a vote of sympathy to Mrs. Rankin and family. Mr. S. Gibson seconded. Mr. W. E. Wilson supported. Mr. Abernethy, associating himself with the previous speakers, said Mr. Rankin had worked hard for them all and never spared himself in their interests. Mr. Storey and Mr. W. E. Wilson were appointed trustees. Messrs. W. E. Wilson and C. Abernethy were elected on the finance committee.

Pharmaceutical Society of Trinidad and Tobago

MEETINGS of the Pharmaceutical Society of Trinidad and Tobago were held in May and June, Mr. Percy Philip (president) in the chair. Mr. John Baptiste was unanimously elected a member of the Society. Correspondence dealt with at May meeting included :—(1) Letter from THE CHEMIST AND DRUGGIST calling attention to subscriptions that would soon have to be renewed. (2) Letter of Mr. Adams giving notice of the following motion: "That the Society consider the advisability of holding a druggist rally once annually, when members of the profession shall have an opportunity of meeting to develop the social side of pharmacy."

The CHAIRMAN said, with respect to the letter from THE CHEMIST AND DRUGGIST, he hoped that the present subscribers would induce other members to subscribe, as the journal was very informative and of real value and help to members of the profession.

The SECRETARY read the draft of the petition to the Governor and members of the Legislative Council for the proposed Board of Pharmacy. Those present expressed their approval of its main features.

The CHAIRMAN said that counsel would revise it, after which the Executive would deal with its circulation for signature.

At the June meeting the correspondence included a letter from the British Guiana Chemists' and Druggists' Association introducting Mr. Walter A. Brathwaite, assistant secretary, who was on his way to London. The SECRETARY said he took Mr. Brathwaite to the president and to all the leading drug stores and several of the minor ones, and discussed with him several matters in connection with pharmacy, including federation on the lines published by the Executive last year in THE CHEMIST AND DRUGGIST.

Mr. ADAMS, seconded by Mr. MATHISON, moved the meeting into committee to discuss the by-laws drafted by Mr. Grant.

Mr. ADAMS moved the adoption of the rules in connection with the Benevolent Fund. This was seconded and carried.

Mr. WALCOTT said he saw on the table copies of the D.D. Ordinance and the Regulations. It was their duty loyally to carry out the provisions, and for that reason they must understand them properly. After a long discussion the meeting was brought to a close.

Petition for a Pharmacy Board

The petition presented to the President and members of the Legislative Council of the Colony comprises eight clauses to the following effect:—

(1) The petitioners are qualified druggists. (2) They feel that a Pharmacy Board should be established as a body corporate with perpetual succession and a common seal. (3) The Board should consist of registered members. (4) The petitioners are members of a responsible profession which plays an exceedingly important part in the welfare of the community. (5) In Great Britain and the self-governing Dominions the administration of pharmacy is entrusted to a body representing the profession; whereas in this Colony the function is exercised by the Medical Board. (6) The petitioners have no representative on the Medical Board. (7) They should be allowed effectively to participate in the administration of professional matters. (8) The creation of such a Board will, *inter alia*, materially improve the status of the profession.

Alternatively, the petitioners pray that a committee be appointed to inquire into the subject-matter of their request. The petition is signed by Messrs. Percy Philip, W. C. Nackid, F. F. Simmons, Edward Lloyd Henry, J. L. Beharry, A. L. Ashing, H. Orsbourne Inniss, F. R. Seales, H. C. Ghent, H. Joseph, E. A. Walcott, H. S. Adams, John F. Weeks, W. C. Best, Carl Bernard McCarthy, Hugh C. Piggott, Ralph R. McCarthy, A. R. Redon, V. Potin, Francis J. Reneaud, F. E. Grant, Geo. Roxborough, L. C. Wharton, C. Maynard, Lionel M. Joseph, P. F. Adams, Geo. Dalton Brown, A. H. Atwell, O. C. Crawford, O. J. Burks, F. L. Mitchell, St. Aubyn Dates, G. R. Tanwing, Rodriguez Gruber, A. G. White, F. O. Mathison, Reg. Adams, Jas. Jorsling, W. A. Percy, X. E. Boland, C. S. Borde, T. R. Hezekiah, J. Quasshie.

Olive Oil

By H. Droop Richmond, F.I.C., and A. D. Powell

It is remarkable that when a new test is devised for detecting a modern practice differing sufficiently from the original methods to be regarded as an adulteration, there is usually a very sharp difference of opinion as to the value of the test, more especially when there are trade interests involved. Naturally, the purists attach far more importance to the test which detects an unusual practice, and stigmatise this practice by more unpleasant names, than do the manufacturers who have evolved this process with the idea of effecting economies in manufacture, and for the "improvement" of their product. The present controversy to which Mr. Parry has just contributed an article as to the value of what is known as the "lamp test" is an instance of this.

The object of his article is to point out that, in his opinion, this test has no value whatsoever. This is in direct opposition to the opinions of MM. Baud and Courtois, who, in a previous article in this journal (*C. & D.*, March 16, p. 325) state definitely, as a result of prolonged observation, that "virgin" oil can be differentiated by the character of its fluorescence from "refined" oil, and from mixtures containing small amounts of extracted oil. The general trend of their article leaves no doubt that they regard such oils as inferior products which have been treated in order to simulate a higher-grade oil. In a later article (*C. & D.*, May 18, p. 609), Mr. C. E. Sage lays further stress on the meaning of the term "refined" as used in the B.P. and as used by the producers. Mr. Parry's argument in refutation of Mr. Sage's interpretation of the term is somewhat lacking in force, as all of the other official oils which he quotes as examples (excepting cod-liver oil) are seed oils, whereas olive oil is a pulp oil, and, therefore, is expressed in the first instance along with the natural juice of the olive, and consequently must be refined in the manner suggested by Mr. Sage to render it saleable.

In his recent contribution, Mr. Parry seems to uphold the view that an olive oil can comply with the definition of the B.P., from whatever olives it is prepared, and by whatever process the manufacturer cares to use, so long as it is sufficiently refined to give a product containing less than three per cent. of fatty acids, and otherwise complying with the characters and tests of the Pharmacopœia; extremely bad oils, which might be refined to make a B.P. oil, he contends, would not be refined as they do not pay, and are, therefore, used in their crude form for such purpose as soap-making. In his article, Mr. Parry is apparently of opinion that all edible and pharmaceutical olive oil is obtained (*a*) on a small scale by expression only, and (*b*) on a large scale by refining the expressed oil, which contains a little too much free acid. Were this a true picture of olive oil manufacture, we do not think anyone would raise any objection, and we feel convinced that these are not the classes of olive oil that previous writers had in mind. Perhaps Mr. Parry is not aware that after the oil has been expressed, the marc is extracted and that the oil is deodorised with charcoal, and otherwise treated to simulate a good oil, and it is these oils that are very properly objected to, more especially when sold for edible purposes. We may say, from our experience, that these oils do not keep as well as expressed oils, and we would also say that it is these oils that the "lamp test," or, as we prefer to talk of it, examination of the fluorescence under ultra-violet light, indicates in a manner which has proved quite reliable.

To criticise Mr. Parry's statements in detail, we would remark that when he says (1) that the test is not sufficiently discriminating between samples obtained by different processes, in our opinion it is just because the test is discriminating between the expressed oils on the one hand, and extracted oils on the other, that it has its value. When he says (2) that the test can be easily vitiated by a trivial treatment of the oils, we would remark that with slight alteration in procedure, the test still retains its value. Probably he is referring to the addition of colouring matter, but unless the colouring matter is added in such great quantity as to render the oil too dark almost to be marketable, the masking can be removed by capillary separation. We hardly think that the heating of an oil to an extent sufficient to alter the fluorescence, and incidentally to spoil the flavour entirely, can be a trivial treatment. He also says (3) that it is also valueless as dealing with refined oils. What he means by this we do not know, but it may imply that an oil which does not fluoresce before treatment with alkali will not be made to fluoresce after treatment.

It is our deliberate opinion, formed after considerable observation, that the fluorescence under ultra-violet light, regarded in its proper capacity as a link in the chain of analytical evidence, is of considerable value; in our experience, the oils which pass the test tend to keep very much longer than those giving a blue fluorescence, and are the only oils which we are now recommending our buyers to accept as edible olive oil. For pharmaceutical purposes, oils which may have undergone the simple process mentioned by Mr. Parry in order to reduce their acidity to within the official limit may be regarded as complying with the pharmacopœial description. Such oils should not give more than a slight bluish fluorescence.

We need hardly point out, especially to an analyst of Mr. Parry's experience, that there are few single tests for the detection of adulteration or sophistication which can stand criticism directed against them as the sole means of analysis; yet these tests, when used in conjunction with others that chemical science has placed at our disposal, yield to the experienced analyst most valuable information. Mr. Parry's citations of the "ester test" for essential oils is a case in point.

By Ernest J. Parry, B.Sc., F.I.C., F.C.S.

We have submitted a proof of Messrs. Richmond and Powell's article to Mr. Ernest J. Parry, who comments as follows :—

I HAVE read with much interest the note on olive oil appearing in the present issue of this journal (which the Editor has kindly given me a sight of before printing), by Messrs. Droop Richmond and Powell. I should like to make the following comments thereon.

I do not agree with the premisses set out in the first paragraph of the article. The whole question of refining olive oils is not what is therein indicated. Anyone with practical knowledge of the olive oil trade must know that the amount of olive oil produced with a very low acid value by mere expression is not enough to supply the world's requirements; that the refining of oils with more free fatty acids than is desirable is a universal process not of modern development; that it is not a device to effect economies for the "improvement" of the product, but an ordinary scientific method of producing a necessary article, substantially identical with that adopted in the world's fatty food factories; and that it is no question of purists or the reverse, but rather one of "food faddists."

I have no hesitation in reiterating that the British Pharmacopœia fully recognises this in its wording, and that any test for discriminating between the unrefined and the refined oils, so long as they have the necessary character, is useless, and only creates confusion, and is, as I said before, mischievous. If I am as an "arbiter elegantiæ" to set myself up as an authority on matters of taste, where will the poor consumer or producer be—surely between the upper and the nether millstones? I know what grade of tea I want, but I do not presume to dictate to the public on what I regard as my standard of quality. If two samples of olive oil, one refined and one unrefined, have characters which the user cannot detect by odour or taste, nor the analyst by chemical means, what can be the necessity of a method which at most can say "These are the same article, but one was made this way, and the other was made that way"? If odour and taste show a difference, then again what is the use of the lamp test?

I have not suggested anything in regard to *extracted* oils in my previous note. I do not agree with Messrs. Richmond and Powell's remark in their second paragraph, "they regard such oils as inferior products which have been treated in order to simulate a higher-grade oil." I

presume, on this argument, a brown sugar, decolorised by charcoal, must raise an inferior product to a status "simulating" a superior product. The treated product is, like other fatty oils refined for food purposes, a higher-grade product—not merely simulates it. Messrs. Richmond and Powell omit to note that the expressed oil of lemon, which is admixed with much water and vegetable tissue, and which has to be dried and filtered, just as olive oil has to be, is not directed to be "refined" in the British Pharmacopœia. I must therefore merely plead guilty in this matter to believing that the authorities who compiled the monographs understood what they were writing and meant "refined" to be interpreted in the ordinary commonsense manner. Perhaps I am wrong, and Messrs. Richmond and Powell are right in thinking that the use of the word "refined" in the case of olive oil is merely an accident, or has been accidentally omitted in the case of lemon oil.

In paragraph 3 of Messrs. Richmond and Powell's note, the view attributed to me is merely the official statement of the British Pharmacopœia. Surely no one with any knowledge of the practical side of olive oil manufacture would seriously suggest that *very* low-grade oils can be refined into *very* high-grade oils; it is not an economic proposition, and is not done. If for many years users have been totally unable to discriminate by odour or taste between the quality of a refined and an unrefined oil, what is the value of advice which amounts to little, if any, more than this:—"Yes, I know the two things are the same, but they were produced by different methods"? I do not agree with the view put forward as to keeping qualities of the legitimately refined oils. It would be interesting to know what view is held by Messrs. Richmond and Powell on the refining processes for oils used as human food. It would be useful to know:—

(1) What public authorities in olive oil producing countries employ the test in question and make official deductions therefrom?

(2) Are the refining of fatty foods, of cacao butter, which is refined so that it is practically free from fatty acids, and similar cases, to be judged by the same deductions and inferences as Messrs. Richmond and Powell suggest? If so, what is the natural consequence?

It appears to me that here we have an analytical toy (I speak only as far as this oil matter is concerned), and to some it appears necessary to erect an adulteration to be tested by that toy. In the light of Messrs. Richmond and Powell's criticisms, I again subscribe to every word I wrote in my previous note, and hope the producers and the trade in general will express their views on the matter.

A Momentous Campaign

ONE of the most striking schemes which the world has ever seen is to be found in its early stages in the retail drug trade of America. This great country of trusts and combines has appreciated the value of the independent druggists. After careful investigation it has been found that the "independent" stores, now representing 75 per cent. of the total volume of trade, may be forced out if no effort is made to save them. They themselves have almost lost heart because of the keen competition and the greater capital of the chain stores. Though 75 per cent. of the turnover is in the hands of the independent druggists, they number 95 per cent. of the stores, thus leaving the 5 per cent. of chain stores doing 25 per cent. of the trade. Statistics were collected from all cities containing about 5,000 drug stores, of which 4,397 were independent and 521 were chain stores. While the average sales per annum in independent stores amounted to $28,000, in the chain stores the average amount was $89,000. In the independent stores the turnover averaged three and a half times per year, but in the chain stores seven times. The growth of the chain stores has been phenomenal. From 1900 to 1920 the numbers multiplied by thirty, and growth on a similar scale has continued.

In order to cope with this situation, and to give the independent druggist the necessary support and assistance, McKesson & Robbins, with some forty-four associated firms, have outlined a comprehensive scheme to challenge the chain stores. This scheme is not in the form of a mammoth chain of independents to break the other chain, but a plan to give confidence as well as moral and financial support to the independent druggist, to fight the "chains" without sacrificing his independence. The forty-four wholesale houses will be managed and controlled from the headquarters in New York. The whole of the United States will be divided into five divisions; each one, comprising a strategical territory and a share of the associated houses, will be under the control of a manager. The five divisional managers as well as two men who are joining the executive of McKesson & Robbins at headquarters have all had great experience with the chain stores. In a joint statement by two of them, they say, "All that we have learned and know we pledge to the independents." They further say that the chains have handicaps which the independents have not and the independents have advantages not possessed by the "chains." They are optimistic as to the future, and absolutely confident that the independents can catch up with the "chains" and make astounding progress. The "fountain expert" from the "chains" also joins this group. He points out that the chain stores do from 20 to 33 per cent. of their total volume of trade at the fountain with a gross profit of 50 per cent., while independents do between 5 to 16 per cent., with a gross profit of about 30 per cent. He intends to plan for the independents as he did for the "chains" and lift up the turnover and profits to the higher level.

Financial help, advice in merchandising and management, the aid of advertising experts and the most economical plan ever devised for distribution will be at the service of all the retailers associated with the scheme. Centralised buying, and if necessary cut prices where the methods of the chain stores demand it, will enable the independents to meet competitive prices. The scheme will also partake of the nature of profit sharing, for the independent druggists will be allowed, until the end of the year, the opportunity of taking anything up to 100 shares at less than market price. These shares may be paid for by instalments, and will in themselves yield very substantial dividends.

During the past few months there has been a series of eight-page advertisements in each issue of the "American Druggist." One now knows who is going to be responsible for the direction and management of this enormous combine of forty-four leading wholesale houses. A life-history of each of the men who are joining the executive, together with his photograph, appears in the advertisements. These experts have left the employment of the "chains" because they say the greatest opportunity to-day is with the independent druggists. On July 28 it was announced that in forty-one of the leading newspapers, reaching an estimated number of readers exceeding 38,000,000, there would appear the first of a series of full-page advertisements issued by McKesson & Robbins and the associated firms for the benefit of independent drug stores. They are asking that the McKesson service symbol shall be exhibited in the windows of all independent druggists to link them up with the national advertising. In their trade advertisements an appeal is made to manufacturers to distribute their products through this service, thus cutting down expense and preserving their own interests by keeping in being the independent druggists. The clarion call has been sounded to go forward in a mighty effort to re-capture the trade which has been diverted to the chain stores.—CENTRALITY (6/8).

THE Manchester School of Pharmacy Old Students' Association will meet on August 14 at the Squirrel Restaurant, Oxford Road, at 5 p.m. for tea, afterwards visiting a theatre. Particulars are obtainable from Miss Golden, 26 Stockport Road, Levenshulme.

NEW VOLUMES ON BACTERIOLOGY.—The Medical Research Council announces the forthcoming publication, in nine volumes, of a "System of Bacteriology in Relation to Medicine." Volume III is to appear first, and is expected shortly. Lord Balfour, in a general preface, remarks that the problems investigated are in the hands of experts in far-separated fields who do not employ the same technique.

Personalities

MR. A. PIRNIE, Ph.C., has passed the Intermediate examination in Science of the University of London.

MR. A. V. SADLER, chemist and druggist, Minehead, has been elected a member of the committee of the local chamber of trade.

MISS DOROTHY WOLFF, daughter of Mr. Hugo Wolff, chemist and druggist, has obtained Class I in the Oxford Final Honours School of Modern History.

MR. JOHN WHITE, chemist and druggist, of the General Infirmary, Leeds, has been appointed dispenser at the Greenwich and Deptford Hospital, London, S.E.

THE Minister of Health has appointed Mr. H. W. S. Francis, O.B.E., a principal assistant secretary, and Mr. R. H. H. Keenlyside, O.B.E., and Mr. J. N. Beckett assistant secretaries of the Ministry.

MISS FRANCES L. PERKINS, daughter of Mr. G. M. Perkins, chemist and druggist, Knighton, Radnorshire, who recently completed her training at the Birmingham School of Art, has been appointed lecturer on art at St. Mary's Training College, Cheltenham.

MR. V. A. WILLS, J.P., chemist and druggist, Merthyr Tydfil, and MRS. WILLS celebrated their golden wedding on August 4. Mr. and Mrs. Wills are well known throughout South Wales. Mr. Wills was born in London. He commenced business as chemist and dentist at Merthyr fifty-two years ago. Mr. Wills was for twenty years a member of the old Merthyr School Board, and for fifteen years a member of the Merthyr Board of Guardians. He was also a member of the old Merthyr Urban District Council, and was chairman of that body in 1898. Mr. Wills is a member of the Court of Governors of the University of South Wales and Monmouthshire. He is a member and past-chairman of the Merthyr Insurance Committee and chairman of the Merthyr Pharmacists' Association. Mrs. Wills, who is a native of co. Cork, has been an active social worker and a member of the Board of Guardians for twenty years. Mr. and Mrs. Wills have eight children.

Births

Notices for insertion in this column must be properly authenticated.

CAMBRIDGE.—At "Dar-es-Salaam," Carrickfergus, co. Antrim, on July 27, the wife of T. R. Cambridge, R.D., of a son and daughter.

FREEMAN.—At 49 Leicester Road, Higher Broughton, Manchester, on August 4, to Dora (*née* Kahn, Huddersfield), the wife of Bernard Freeman, M.P.S., of a son.

LANGLEY.—On August 4, the wife of G. H. Langley, chemist and druggist, Foulsham, of a daughter.

MANN.—At 1 Victoria Square, Low Moor, Bradford, on August 1, Winnie (*née* Ellis), the wife of Clifford Mann, chemist and druggist, of a daughter.

Marriages

ALLAN—BEADSWORTH.—At Christ Church, Glodwick, on July 16, John Allan, chemist and druggist, 16 Abbey Hills Road, Oldham, to Gladys Emma Beadsworth.

ATKINS — CHARLTON. — At Newcastle-upon-Tyne, recently, Robert Victor Atkins, chemist and druggist, to Margaret A. T. Charlton.

MADEN—KENNEDY.—At Reading, on July 22, Harry Maden, chemist and druggist, to Jean Kennedy.

MAJOR—PALMER.—At Park Road Baptist Church, Peterborough, on July 15, Wilfred Audas Major, chemist and druggist, to Marjorie Agnes Palmer.

MALONE—O'DONNELL.—At St. James's Roman Catholic Church, Renfrew, on July 31, William James Malone, chemist and druggist, to Catherine O'Donnell.

ROBINSON—HARTLEY.—At Holy Trinity Church, Birchfields, Birmingham, on July 20, Stanley Robinson, chemist and druggist, to Winifred E. Hartley.

Deaths

ARCHER.—On July 31, Mr. Arthur Ernest Archer, chemist and druggist, Post Office, Epworth. Mr. Archer qualified in 1904.

COUPER.—At Whitstable, on July 27, after a brief illness, Mr. Frederick Thomas Couper, chemist and druggist, 115 High Street, aged seventy. Mr. Couper had been in business at Whitstable for twenty-eight years, and was previously in Edinburgh and at Mussoorie, India.

CULBERT.—At a Glasgow nursing home, recently, suddenly, Mr. Alexander Spence Culbert, chemist's assistant, brother of Mr. William Culbert and Mr. Hugh Spence Culbert, chemists and druggists, Airdrie and Coatbridge.

LOVELUCK.—At his residence in Pelham Grove, Liverpool, on August 1, after a long illness, Mr. Griffith David Loveluck, J.P., chemist and druggist, aged sixty-five. Mr. Loveluck carried on business in Aberavon for a long period. He was the first president of the Port Talbot Chamber of Trade and a prominent freemason. About twelve months ago he retired and went to Liverpool on account of failing health. Mr. Loveluck is survived by a widow and five children. Sympathetic reference to his death was made at a sitting of the Port Talbot magistrates on August 1.

WELSBACH.—The death is announced of Baron Karl Auer von Welsbach, inventor of the incandescent gas mantle, the Auer gas lamp, and the Osmium lamp, aged seventy. Baron Welsbach patented his first commercial gas mantle in 1885, and followed up this success by making various improvements in his process. In 1897 he introduced the Osmium filament lamp, and six years later he invented the Auer lighting process.

Trade Notes

D. AND P. WORK.—Alfred E. Briggs, 249 Oxford Road, Manchester, calls attention to his developing and printing service elsewhere in this issue, and offers to send details of special chemists' terms on application.

ASPIRIN TABLETS.—Arthur H. Cox & Co., Ltd., manufacturing chemists, Brighton, announce that despite the increase in the cost of aspirin, the prices for their aspirin tablets remain unaltered for the present.

SEED DRESSINGS.—Tomlinson & Hayward, Ltd., 51 Newland, Lincoln, who have specialised for a large number of years in meeting the requirements of agricultural chemists, advertise seed dressings, sulphate of copper and formalin in this issue.

THE WESTBOURNE PROPRIETARIES, 28 All Saints' Road, Westbourne Park, London, W.11, who are specialising in the manufacture of pills, tablets and lozenges, will prepare them either according to private formulas or from their customers' own ingredients.

NEW-MIX COMPETITION.—Gilmont Products, Ltd., 356 Gray's Inn Road, London, W.C.1, have lately shown us the photographs submitted by the entrants in the New-Mix window display competition. Considerable originality is evident in many of the arrangements devised for drawing attention to the dentifrice. Owing to the large number of entries for the competition and the excellence of the displays, the directors of the company, who ask us to express to chemists their appreciation of the co-operation, have awarded a number of additional consolation prizes.

BRITISH INDUSTRIES FAIR.—The London branch of the 1930 British Industries Fair will be held at Olympia from February 17 to 28, the chemical and drugs section being situated in the annexe of the main hall. At a meeting of the advisory committee of exhibitors in the London section of the Fair, on July 30, it was stated that only 5 per cent. of the total space of the new and enlarged Olympia—described as the finest exhibition hall in the country—remains unlet, while in some trade sections there is now no space available. The bookings are 75 per cent. higher than for the same period last year. Full particulars may be obtained from the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

Observations and Reflections

By Xrayser III

Unstamped Proprietaries

may prove a not unmixed blessing to chemists and druggists who dispense them when prescribed by medical practitioners, either for private or insured patients, and particularly for the latter, as I pointed out some weeks ago (*C. & D.*, June 29, p. 791). In the case of private patients it may only involve some little delay in procuring the unstamped packages when not already in stock, but the fear of being charged with delay in supplying the medicine for an insured person may, in such a case, induce some chemists to hand over a stamped package, in the probably vain hope that the price of the stamp will be allowed by the Pricing Office if the proper intimation is made on the prescription. Loss from this cause will be most annoying, yet it is difficult to see how such loss is to be avoided unless chemists feel compelled to keep in stock both stamped and unstamped packages of many proprietary medicines. I am cordially in agreement with "Observer" that there should be no question of the chemist losing money over the transaction (*C. & D.*, August 3, p. 146); but money may be lost through overstocking goods, as well as in other ways, and there appears to be no other way out of the difficulty than that the Pricing Offices should be authorised to allow the value of stamps if and when chemists give formal notification that stamped packages have been supplied in cases of emergency.

The Confusion

as to what is a drug and what is a food may seem to be mitigated as far as tea is concerned, because it has been authoritatively declared not to be a food. Of course it is not, therefore, necessarily a drug; it may be something else! There are those who regard it as (shall I say) a euphoristic beverage. A quotation from a leading newspaper will serve to illustrate this notion. In discussing the recent presidential election it says:—"The substitutes for alcohol in the United States are many. Physiologically and in modern conditions mankind's craving for some sort of tonic is insuperable. Prohibitionists, not least, have their 'compensatory' devices—the kaffein of coffee, the tannin (*sic*) in tea, the mild inwardly secreted alcohol from the fermentation of sweets continually chewed." Notwithstanding the strange want of precise knowledge on the part of one who is supposed to be instructing his readers, it is clear that the writer has in mind the possibility of tea being used as a mild stimulant. His suggestion that it may be considered as a substitute for alcohol is put upon its proper level by himself when he links it with "the mild inwardly secreted alcohol from the fermentation of sweets continually chewed." One wonders from whence has arisen this idea of the digestive organs being a self-contained brewery.

Judicial Comments

in Pharmacy Act cases often reveal indifference to our view of the questions before the Court; but for lack of sympathy with what is necessary in the public interest it would be difficult to beat a recent remark of the Bloomsbury County Court judge (*C. & D.*, August 3, p. 134). A limited company which includes the words "Cash Chemists" in its business style had incurred a penalty for not having a registered chemist as superintendent, but the judge calmly remarked that it was difficult to know what they could call themselves but chemists! Ignoring every argument provided in Acts of Parliament, he appears to have reasoned that a company including our title in its trade description and dealing in chemists' goods should logically be within its rights in carrying on business without complying with legal requirements. Unfortunately, according to your report, the manner in which the case was presented for the Pharmaceutical Society does not appear to have been particularly effective, as it was after the arguments were practically completed that the judge made the remark quoted. This is not as it should be, and I would suggest that the Society make arrangements to have their case presented in a more convincing manner in future, with particular reference to the necessity of safeguarding the public interest by not allowing the misuse of our titles.

Diagnosis and Treatment

as practised by the medical profession at the present time are sharply contrasted by Professor W. E. Dixon in his address, which he entitled "Physiology—the Basis of Treatment," given by him at the meeting of the British Association at Cape Town. He is of opinion that the study of diagnosis has outrun that of the treatment of disease, and he believes that in the future the treatment of patients will "be handed over to those who have made a special study of the treatment of that particular group of diseases from one of which the patient is suffering." When that stage in the evolution of medicine arrives there will be two classes of specialists, namely, those for diagnosis (these are already very much in evidence) and those for advice in therapeutics. Apparently we are now on the verge of this, because Professor Dixon says that "the advent of institutions for experimental therapeutics is upon us, though Britain has taken little part in the movement." That there has hitherto been a neglect of pharmacology in this country is no doubt true, and this notwithstanding the hopes which the work of those who founded the modern school of pharmacology seemed to promise thirty years ago. It was a false start made in ignorance of what psychology and physiology were going to postulate in the intervening years. Those of us who are a little more intimately brought into contact with people when they are not so ill as to be put into categories of diseases are not so sure that institutional experimentation is going to prove the best means of teaching treatment. In Professor Dixon's address there is a clear indication that he himself realises that the sick individual is still an individual and needs individual, and not mass, treatment. The address is one which should be read and pondered by all who are concerned as to the progress of medicine.

To Preserve One's Poise

it seems to be necessary to consider what is in the other scale-pan of the balance and evaluate its contents. Your issue of August 3 contains a note of someone curing the sting of a bee by the application of the bruised leaf of the common plantain. Here is an example of the crudest empiricism! I do not propose to estimate its value. Each will do that for himself. But as a matter of general interest it is worth pointing out that this virtue of plantain leaves has been a matter of common experience for centuries. An edition of the herbal of Apuleius Platonicus (which may have been written as early as the fourth century) printed in the fifteenth century gives an unmistakable representation of *Plantago* with drawings of a serpent and a scorpion. In an English translation, of the sixteenth century, of "De Proprietatibus Rerum" (a thirteenth century work by Bartholomeus Anglicus), the matter is expounded in the vernacular thus: "Weybread hight *Plantago*.—It healeth sore wounds, and biting of wood hounds, and is contrary to venom and namely to the venom of an attercop [spider, or other venomous creature]." Shakespeare was acquainted with its usefulness in such matters, as appears from Romeo's recommendation of a plantain leaf for a broken shin; there is a similar passage in "Love's Labour's Lost." In the thirteenth and fourteenth centuries plantain (at that time generally called weybrede) was employed in a great variety of remedies and was frequently an ingredient in various recipes for the famous "gratia Dei" and the equally well-known ointment popilion (unguentum populneum). Both the herb and seeds became official in the first London Phamacopœia.

Iodine Tincture

for internal administration is probably being used more to-day than at any previous period, and the best results have been got by administration of the old French preparation. When taken with a large quantity of milk it causes no digestive disturbance such as occurs when the tincture is diluted simply with water, and it is all to the good that the tincture should contain no potassium iodide. I can vouch for the beneficial results which have followed the taking of quite large doses of the French tincture containing no potassium iodide, but it was invariably taken in milk.



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Editorial Articles

Compounding and Dispensing

THERE has been, it is to be feared, general laxity in our habit of using the word "dispensing" in the sense of mixing medicine as well as handing it over to patients or their representatives. This added meaning has become crystallised in standard dictionaries; but such recognition of misuse does not make it other than a fact that "compounding" definitely means mixing or making up. Inclusion of both terms in the Pharmacy Act, 1868, must be assumed to have been intended to cover different actions, and one can well imagine that the object aimed at was to restrict to chemists and druggists both the compounding of poisons for retailing and the compounding of poisons for dispensing. There is evidence of clear discrimination between supplying poisons when required by customers in the ordinary course of retail dealing and of dispensing them as medicines when ordered in prescriptions written, presumably, by medical practitioners. Compounding by unqualified persons was obviously intended to be regarded as an offence, whether the product compounded was simply sold over the counter, or first dealt with as is customary in dispensing practice. So far as we are aware, there is no case on record of prosecution in Great Britain for illegally compounding poisons, neither is there any instance of successful prosecution in cases of dispensing poisons apart from the act of selling. There are even greater difficulties in the way of proving that the compounding has been done by an unqualified person than that the dispensing was so done, and it is easier by far to prove the act of retailing in the absence of a duly qualified person. It is probably safe to assume, therefore, that the distinction between "compounding" and "dispensing," as employed in the Pharmacy Act, 1868, has not been prejudiced by the lack of attempts to secure legal definition of the terms in the Courts. Further, though it has been customary to misuse the term "dispensing" as including the mixing of medicines, there is no question of the term "compounding" not having been employed in Great Britain as meaning anything else but mixing or making up medicine. It should not, therefore, be difficult, if a suitable test case was taken, to prove that compounding and dispensing are separate and distinct functions. The former implies nothing beyond the mixing of substances, and the latter ought to be defined as meaning the supplying of medicines with directions how they are to be used. This is substantially, as we understand it, the contention of the British Guiana Chemists' and Druggists' Association in the stand which they are taking (*C. & D.*, July 13, p. 67) against encroachments on established usage in their country. Something approximating to this definition was a dictum of a High Court judge many years ago, and the latter ought to be followed up in such a way as might result in a satisfactory High Court decision on the point. It is probably not generally appreciated that a clear understanding of what "dispensing" means is of importance to everyone interested in the supply of medicines for insured

persons. Though it is provided that chemists only may dispense such medicines, directly or by persons under their supervision, the National Health Insurance Acts fail to define what "dispense" means. There has been a rough general assumption that persons other than chemists may only go on the panel for the supply of simple or uncompounded drugs and appliances; but there is reason to believe that compounded articles have been supplied by unqualified dealers, when ordered on the usual prescription-forms, and that such supplies have been paid for without question. It may be submitted that the handing over of compounded medicines is an act of dispensing, and ought, as such, be restricted to chemists. Further, it may reasonably be contended that the supply of even simple or uncompounded drugs is dispensing, if practitioners order them with special directions for use and those directions are written on labels attached to the packages in which the medicines are supplied to the insured persons. But the fact remains that the word "dispense" is not interpreted in the National Health Insurance Acts. Neither is "compounding" there referred to, possibly because it is regarded as a matter of indifference who compounds medicines so long as they are only dispensed by or under the supervision of chemists and druggists. Such an attitude tends to economy by enabling wholesalers to compound the medicines and supply them to chemists at prices which can be quoted in the official drug tariff: those prices are lower than the chemist would have to charge if he compounded the preparations himself, and he is also allowed a lower dispensing fee when he supplies the ready compounded articles without admixture. But this is by the way. The National Insurance Acts do not help us to discriminate between the terms "compounding" and "dispensing." The Pharmacy Act, 1868, does help in this direction; and it ought not to be impossible to secure authoritative legal definition of the terms, based on commonsensible interpretations.

New Books

Stephenson, T.—*Incompatibility in Prescriptions and How to Avoid It.* 8½ in. by 5½ in. Pp. 61. 4s. 6d. "The Prescriber" Offices, 6 South Charlotte Street, Edinburgh. [Originally issued (pp. 32) in 1915. The work has been revised and a dictionary of incompatibilities has been added. The present requirements in respect of French tincture of iodine (p. 47) might have been made more complete.]

Redgrove, H. S., and Foan, A. G.—*Blonde or Brunette.* 8¾ in. by 5½ in. Pp. xii + 182. 7s. 6d. William Heinemann (Medical Books), Ltd., 99 Great Russell Street, London, W.C.1. [The authors of this book, which is described as "a complete account of the theory and practice of hair-dyeing in all its branches," are a chemist and a hairdresser, and it will be recalled that Mr. Redgrove recently contributed an article on "The Chemistry of Hair Dyes" to THE CHEMIST AND DRUGGIST (1928, II, 760). The volume is divided into four parts, relating respectively to the preliminary considerations concerning the structure and pigments of the hair and colouring matters generally; hair dyes, bleaches and decolorants; their nature, composition and uses; the practical art of hair-dyeing; the causes of grey hair, with some hints to those who wish to avoid premature greyness. There are some twenty-eight illustrations which relate mainly to various manipulations of the hair, though some, e.g., the henna plant, chamomile and German chamomile, are of general pharmaceutical interest. Books devoted exclusively to hair-dyeing are relatively few, information on the subject being generally found in those concerned with beauty culture, so that the "Blonde or Brunette," with its numerous formulas and practical information, is a welcome addition to the literature of the subject.]

Report on Psycho-Analysis

IN October 1926, the Council of the British Medical Association, acting on an instruction passed at the previous annual meeting of the Association, appointed a committee to investigate and report upon psycho-analysis. The committee, consisting of twenty-one medical men under the chairmanship of Dr. R. Langdon-Down, sat at intervals from March 1927 to May 1929. It surveyed the whole field of psycho-therapy, and its report has been published in Supplement 1300 of "The British Medical Journal." The historical survey indicates in outline the salient features of the systems of Freud, Adler, Jung, and other investigators; the remainder of the report deals with the scope of the subject and gives criticisms, with replies by the president of the British Psycho-Analytical Society. The conclusions reached by the Committee are:—

I. Psycho-analysis is a term now used in two ways:—
  i. In a loose popular sense hardly capable of description or definition so wide is its extension.
  ii. In the strict sense of the technique devised by Freud, who first used the term, and the theory which he has built upon his work.

It is accordingly recognised that in any scientific inquiry into the matter the claims of Freud and his followers to the use and definition of the term are just and must be respected.

II. It is recognised that there are workers and writers of repute in the field of psychology and psycho-pathology who use an exploratory therapy, but do not claim to be psycho-analysts, and indeed adopt some other descriptive term such as analytical psychology, individual psychology, deep mental analysis, etc.; and further, that there are practitioners of other methods of psycho-therapy, hardly, if at all, connected with any recognised form of analytical teaching to whom the term psycho-analyst is also often quite wrongly applied by the public. The Committee recognises that psycho-analysis should not be held responsible for the opinions or actions of those who are not in the proper sense psycho-analysts.

III. The Committee has recognised certain other misconceptions in relation to psycho-analysis, and has endeavoured to remove them.

IV. The Committee finds that even among many of those most hostile to psycho-analysis there is a disposition to accept the existence of the unconscious mind as a reasonable hypothesis, though some prefer to use other terms to describe what is meant. Some members of the Committee, however, do not even go so far as this.

V. The Committee has set forth the most important of the criticisms of the theory and method of psycho-analysis, together with the answers of a recognised psycho-analyst thereto. It is of opinion that it is impossible for the Committee to make any general pronouncement on questions of this nature.

VI. From the nature of the case the Committee has had no opportunity of testing psycho-analysis as a therapeutic method. It is therefore not in a position to express any collective opinion either in favour of the practice or in opposition to it. The claims of its advocates and the criticisms of those who oppose it must, as in other disputed issues, be tested by time, by experience, and by discussion.

Wills

MR. JOHN SILAS LONGDIN, of 12 Royal Avenue, Scarborough, Yorks, chemist and druggist, of T. W. Longdin & Sons, 19 Eastborough, who saw service during the Great War, and who died on March 22 last, aged thirty-eight, son of Thomas William Longdin, chemist, left estate of the gross value of £2,410 0s. 5d., with net personalty *nil*.

MR. PAUL THOMAS WHITE, F.C.S., of 36 Shakespeare Road, Hanwell, W., who died on June 29 last, aged seventy-nine years, left estate of the gross value of £5,213 5s. 8d., with net personalty £5,142 5s. 9d. Probate of his will has been granted to his widow, Mrs. Emma Winzer White, of the same address, and his brother-in-law, the Rev. Arthur William Septimus Albert Row, of 107 Edith Road, West Kensington, W.

The British Association

(Concluded from the C. & D., August 3, p. 141)

The Relation of Organic Chemistry to Biology

By Professor GEORGE BARGER, M.A., D.Sc., F.R.S.

[ABSTRACT]

THE early chemists were even more concerned with separating one substance from another than many of us are to-day. Progress was at first limited to mineral substances capable of withstanding powerful reagents and a high temperature; much of the old chemistry is concerned with the heavy metals. The use of vegetable drugs, however, led pharmacists to examine the constituents of plants, and thus the foundations of descriptive biochemistry were laid. Scheele investigated a number of organic acids in the wet way, but further advance could not take place without the development of organic analysis, by Gay-Lussac and Thénard (1810), by Berzelius, Liebig, and others. Four years later, in 1828, Wöhler's synthesis of urea attracted universal attention, and since then much labour has been expended on the synthesis of vital products as an ultimate proof of their structure. Wöhler had apparently no connection with medicine or pharmacy, but Liebig was a pharmaceutical apprentice for one year, Frankland a druggist's assistant, Dumas, Schorlemmer, and even Wilhelmy, who investigated the kinetics of sugar hydrolysis, were pharmacists. Gmelin, Mitscherlich, Wurtz, and Cannizzaro studied medicine; even in the present century medically qualified professors of general chemistry survived (Crum Brown, Emerson Reynolds). The pharmacists soon found a special field of research in alkaloids, essential oils, and other materia medica. Within a few years of the recognition of the first organic base, morphine, by the German pharmacist Sertürner, a dozen alkaloids had been discovered, mostly in France, by Pelletier and Caventou, professors at the Ecole de Pharmacie.

STRUCTURE OF AMINO-ACIDS

A knowledge of the structure of amino-acids may throw light on how other nitrogenous constituents arise, particularly in plants. As an example the most recently discovered amino-acid may be quoted. The American bacteriologist Mueller found in casein and other proteins a new constituent containing sulphur, quite different from the well-known cystine. Dr. Coyne and I have recently established its constitution by synthesis. It turns out to be γ-methylthiol-α-amino-n-butyric acid, $CH_3.S.CH_2.CH(NH_2)COOH$, and we named it methionine. The methylthiol grouping at once indicates that it is the source of methylmercaptan, the occurrence of which in putrefaction was known, although not hitherto intelligible. Methionine is evidently also the parent substance of cheirolin occurring in the seeds of the wallflower and of other *Cruciferæ*. Schneider had long ago established for this substance the remarkable constitution $CH_3.SO_2.CH_2.CH_2.CH_2.N.CS$. We now see at once that cheirolin is the thiocarbimide of oxidised and decarboxylated methionine. Similarly Perkin and Robinson connected the chemistry of harmine and harmaline with tryptophane when they showed that the mysterious base $C_{12}H_{10}N_2$, which Hopkins and Cole obtained by oxidising tryptophane $C_{11}H_{12}O_2N_2$ with ferric chloride, is identical with harman.

This observation not only settled the constitution of the alkaloids in question, but also explained the fitful yield of the oxidation product of tryptophane, which, after decarboxylation, had condensed with acetaldehyde. Soon afterwards Späth showed that harman itself occurs in nature, as the alkaloid aribine, which had been given the erroneous formula $C_{23}H_{20}N_4$. It is becoming increasingly evident that many alkaloids arise by condensation of amino-acid residues. Mezcaline and other alkaloids of *Cactaceæ* are closely connected with phenylalanine and tyrosine, as Späth has shown, and the mode of origin of isoquinoline alkaloids from aromatic amino-acids has also become clear. Harmine, harmaline, physostigmine, and rutaecarpine are all derived from tryptophane, and it looks as if the same is true of other alkaloids whose constitution, like that of strychnine and of brucine, remains obscure.

The isolation of some natural substances, of great physiological interest, is beset with difficulties because they are present in minute amount and have not the convenient solubility relations, which facilitate the separation of the alkaloids. This applies to the hormones present in animal tissues. Here the American slaughter-houses provide valuable facilities, and it is significant that adrenaline, thyroxine, and insulin were first crystallised in America, although the constitution of the two former harmones was later established in Europe, where also their synthesis was effected, that of thyroxine only a few years ago, through the brilliant work of Harington. The difficulties of isolating vitamins is still more formidable: in the case of the antineuritic vitamin B, which is almost certainly a fairly simple substance, susceptible to attack by the methods of organic chemistry, most progress towards isolation has been achieved by selective adsorption and the methods employed by Willstätter for enzymes. The discovery by Rosenheim and Windaus that vitamin D is formed by the irradiation of ergosterol has suddenly brought into prominence a substance which before was but a curiosity, chiefly known through the work of the French pharmacist, Tanret. At the same time the interest of biochemists in photochemistry has been stimulated, as well as in the extensive work of Windaus on the structure of cholesterol, which the latter had already shown to be connected with the bile acids, largely investigated by Wieland.

The sudden emergence of ergosterol into prominence does not stand alone; another of Tanret's ergot substances ergothioneine, at first also an isolated curiosity, has acquired more general significance because it has been found in mammalian red corpuscles; it is likely that this will ultimately lead to the discovery in proteins of yet another sulphur-containing amino-acid, possibly a thiol histidine. Altogether ergot has yielded more substances of general biological interest than any other single plant.

There is no reason why an animal or a plant should be recognised entirely by its morphological characters, but systematists, not being chemists, are naturally apt to rely on what they can see, rather than what they can test for. It is very rarely that chemical characteristics are mentioned, although most floras refer to the odour of trimethylamine in the Stinking Goosefoot (*Chenopodium vulgaria*) and that of sulphide oil in *Sisymbrium Alliaria*. With micro-organisms it is different. The bacteriologist cannot always distinguish one bacillus from another merely by looking at it, nor even by staining it. He has to grow it in a variety of media. The relation between microbiology and organic chemistry is beneficial to both. The list of organic substances which can be produced by micro-organisms on an industrial scale, mostly from carbohydrates, is a growing one. During the world war the water power of Switzerland could temporarily compete with the fermentation industry in producing alcohol (via calcium carbide), but later the potato reasserted its superiority. The same war period saw the industrial production of glycerol by yeast, and the production of acetone and butyl alcohol by bacteria, both from carbohydrates. The peculiar metabolism of many micro-organisms still awaits utilisation.

PLANT CLASSIFICATION

The group of plants in which chemical constituents have been most widely used in classification is that of the Lichens. Lichenologists have long used chemical reactions with potassium hydroxide, bleaching powder and ferric chloride, for the identification of species and genera. In Phanerograms the taxonomic value of the chemical constituents is slight. Substances of obvious metabolic significance may extend throughout a whole order; thus inulin occurs as reserve carbohydrate in all divisions of the *Compositæ*.

Probably the most extensive attempt to use chemical constituents for botanical classification has been made by R. T. Baker and H. G. Smith, in the case of the Australian genus *Eucalyptus* with about 200 species; the essential oils from well over half of these have been examined. Baker and Smith trace a relation between the venation of the mature leaves and the composition of their essential oil. The genus is thus divided into fairly well-marked groups, and it is possible to suggest the probable constituents of the oil of a given species by

examining the venation of the leaves, and, conversely, by chemical investigation of the oil to gain a clue to the species. Maiden, the botanical expert on *Eucalyptus*, has not always agreed with the classification of the chemists, but upon occasion has discovered morphological differences after a delimitation of species had been proposed on chemical grounds.

Alkaloids

Among characteristic plant constituents perhaps most chemical labour has been expended in the alkaloids, which are usually restricted to a particular order, genus, or species. An increased knowledge of the various amino-acids of protein, and a study of many alkaloids has in many cases indicated a plausible way in which the alkaloids, particularly those containing an isoquinoline nucleus, may arise from aromatic amino-acids, by decarboxylation and ring formation from the side chain, but we are still very much in the dark as to the physiological importance of alkaloids to the plant. Nor is it easy to trace a connection between chemical structure and botanical classification. Thus within the same genus differently constituted alkaloids may occur, or certain species may contain an alkaloid and others not. Some thirty-five species of *Cytisus* were examined by Plugge and Rauwerda; about half contain cytisine, half do not. Yet cytisine occurs in *Ulex*, *Genista*, and several other genera of *Leguminosæ*. It may even happen that in one and the same species the alkaloids change according to the age of the plant. Thus *Papaver orientale* contains during the vegetative period only thebaine, which is almost entirely replaced by isothebaine after the death of the aerial parts of the plant. Obviously it is very difficult under these circumstances to draw conclusions as to a taxonomic relationship. The only wide generalisation which seems to me justified is that the large group of isoquinoline alkaloids are charactertistic of the rather primitive cohort, *Ranales*, and the related order, *Papaveraceæ*.

Physiology as Basis of Treatment

By Professor W. E. Dixon, M.D., F.R.S.

[Abstract]

The ultimate aim of medicine is the prevention or cure of disease; this practical aspect so far dominates all others that it is often referred to as the healing art; indeed, it is difficult to think of medicine apart from treatment. The term "physiology" is usually used to designate the science of function, whether studied in broad outline and dealing with the mechanism of action or as the physico-chemical mechanisms leading up to this action. Disease means the unusual functioning of tissues which may be the result of accident, hereditary weakness, or parasitic organisms. The unusual functioning is physiological and perhaps the best for the organism under the unusual conditions. The science of medicine then is nothing more than trained and organised common sense based on physiology. The science of treatment or pharmacology is relatively new; it includes knowledge of all kinds dealing with the treatment of disease or alleviation of suffering. It is the climax of physiology and pathology, devised to subserve a practical end. Few drugs now exist the mode of action of which is not understood, and the goal is not so far distant when it will be possible to introduce into the animal economy a factor which will exaggerate or retard the function of any tissue or collection of cells in the body, leaving the others unaffected.

Chemo-Therapy

At one time hopes ran high that the chemical structure of the molecule might indicate pharmacological action. During the last fifty years many laborious researches have been conducted with this object, to modify the molecule that it may conform to some required action. Drug action is not determined directly by chemical combination with body constituents, but rather by delicate physical processes such as those of adsorption, solution, and surface tension. Chemists have as yet not even determined the requirements of the molecule for the production of colour sensation. Slight alteration of a molecule already complicated and with a known action has led to the production of many useful compounds, and not infrequently we may foresee the type of action which will occur under such special conditions. Considerations of this nature have led to the synthesis of the new local anæsthetics, antiseptics, antipyretics, diuretics, tropeines and other useful substances. Ehrlich noticed that colouring matters injected into the living organism had a selective affinity for certain cells, and he believed that it might be possible by making use of this property to select suitable substances which would destroy the casual agents of disease, parasites and microbes, and leave the tissues of the host uninfluenced.

Parasites causing disease in man may be crudely divided into worms, protozoa, and bacteria. Chemi-therapy, that is specific therapy of infectious disease, has had marked success in curing disease due to parasites in the first and second of these groups; these diseases are found mainly in the tropics. It has obtained much less success in the third group. Trypanosomiasis affects both man and animal, and renders large tracts of land practically uninhabitable. The members of two groups of chemical substances excel all others in their curative value in trypanosomiasis and spirochætosis; these are the organic arsenical compounds and the dyes. It is well known now that none of these compounds acts directly on the parasite like arsenious acid. All these organic arsenical compounds must be injected in order to produce a satisfactory effect; but, *m*-amino-*p*-hydroxyl phenyl arsenic acid acts upon and destroys spirochætes when taken by the mouth; it is generally administered as its acetyl derivative which is known as stovarsol. Stovarsol has been largely used as a preventive to syphilis, but it is now known that it has a remarkable curative action in amœbic dysentery like emetine, and that in cases of benign tertiary malaria it checks the attacks and prevents the return of the disease, at all events for many months. It was at first thought that, as laboratory animals are so easily infected with trypanosomes, it should be an easy matter to determine which compounds were likely to be most valuable in the treatment of trypanosomiasis; unfortunately this is not the case, a drug may cure trypanosomiasis in one animal and not another and the crucial tests must always be made on man. Fourneau's *o*-hydroxy *p*-acetyl amino-phenyl arsenic acid acts much better on laboratory animals as a cure for trypanosomiasis than tryparsamide, but has not proved so satisfactory as tryparsamide in the Congo for the treatment of sleeping sickness. Since the crucial test with all these compounds must be made in Africa, it is obvious that the expense and difficulty of continuing such researches is enormous. Most of the antimony derivatives corresponding with the organic arsenicals have been prepared; for example, that corresponding with acetyl-atoxyl, also *m*-chloro-*p*-acetyl amino phenyl stibamate of soda have been extensively employed in kala-azar and bilhartzia. Speaking generally, they have a more powerful action than tartar emetic on such diseases as bilhartzia, kala-azar, and filaria, and to some of them, like sodium antimony thioglycollate, the parasites do not become readily immune. Unfortunately the organic compounds of antimony have a toxic action on the tissues and are very difficult to administer, so that antimony tartrate of stibamine urea ($NH_2CO.NH.C_6H_4SbO(OH)_2$), a compound which has recently been prepared pure, are generally preferred.

Dyes

Many dye substances have been used in medicine: as they are readily adsorbed on to sell surfaces the concentration here is always high and the surface properties of such cells are often modified in consequence. One general principle which follows from this is that widely different dyes often possess properties in common, for example, that of antiseptic. Trypan red and trypan blue belong to the benzidine dyes. Trypan blue was employed by Professor Nuttall, in piroplasma infections in animals, with results that most South Africans are well acquainted. Afridol violet, a derivative of diamino diphenyl urea, and some allied dyes have also a powerful action on piroplasma. Many of the dyes, like flavine, fuchsin, and methyl violet, have two amino radicles in the para position, relative to the carbon atoms uniting the nuclei. The azo-dyes and the

innumerable derivatives from them, which have been examined by Nicolle and Mesnil, present no common features with those of the triphenyl methane group. Amino groups appear to be an important factor, but it is the position of these in the rings, even more than the character of the radicle, which determines the effect.

Bacterial Infections

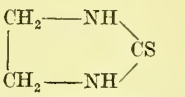
Drugs are employed in tuberculosis either with the object of attacking and preventing the growth of the tubercle bacillus or other organisms with which the disease may be associated, of neutralising poisonous toxins, or of removing or relieving symptoms. Two groups of organic compounds are especially remarkable for their chemo-therapeutic action on bacteria. The first group has the quinine complex; quinine is the methyl-ester of cupreine and it can be reduced by nascent hydrogen to form hydrocupreine. The following table shows the effect of two derivatives of hydrocupreine in arresting the growth of certain micro-organisms.

	Ethyl hydrocupreine (optoquin)	*Iso-octyl hydrocupreine (vuzin)*
Diphtheria bacillus ...	1 in 100,000	1 in 750,000
Pneumococcus	1 in 400,000	Negligible
Staphylococcus ...	1 in 500	1 in 16,000
Streptococcus	1 in 1,000	1 in 80,000

The action of optoquin on the pneumococcus and of vuzin on *Bacillus diphtheriæ* is highly specific; the higher and lower homologues have a greatly diminished effect. Many substances destroy bacteria in the test tube, but these drugs act in the animal body as well as in the test tube, and enough can be given by medicinal doses to animals and men to render the blood of these animals bactericidal. The second group of drugs which exert a marked action on bacteria are certain derivatives of acridine. Trypaflavin was used during the war for infected wounds: unlike most antiseptics it acts better in the presence of protein, but is not sufficiently selective or specific on micro-organisms in the presence of body tissues to be of any real value; it is easily absorbed and readily causes œdema. Rivanol is a more recent derivative of acridine, and Morgenroth cured streptococcic infections by injections of rivanol under the skin. The alkyl derivatives of resorcinol lower surface tension, but the hexyl derivatives most, and its bactericidal properties are largely dependent on this factor. Substances in solution which depress surface tension are the more efficient germicides because they penetrate better. They are adsorbed by particles in suspension like bacteria, and they diffuse through the cell membrane inversely as the surface tension is lowered. It has been shown that 0.1 per cent. of hexyl resorcinol with 30 per cent. of glycerin, and water to 100, is one of the most powerful germicides known and possesses a surface tension of 37 dynes per sq. cm. Pathological organisms are destroyed by this in fifteen seconds. The chemo-therapeutic substances which are known to act on bacteria are without value in tuberculosis.

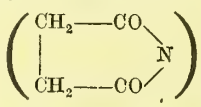
Success, however, has been claimed for several metallic compounds. It is by no means clear that the results which have been obtained by administering gold salts to tuberculous patients or animals are superior to those given by copper salts which preceded them. Krysolgan prevents the growth of the tubercle bacillus in cultures in 1 part in 1,000,000, but animal experiments with this substance are not promising, though the clinical results are certainly helpful. Another "gold" cure recently introduced is a double thiosulphate of gold and sodium, $Au(S_2O_3)_2Na_3$, which, although a well-recognised substance, is called sanocrysin. Like its predecessors, it retards growth of the tubercle bacillus in glycerinated bouillon in such strengths as 1 in 8,000,000, but how serum added to the cultures affects its action has not been discovered. Nevertheless, this is a very important point, since such chemo-therapeutic substances as exert an undoubted action on bacteria invariably act the better in the presence of the tissue fluids. It is assumed that gold injections destroy the tubercle bacillus *in vivo*, and that doses which are not poisonous to normal animals kill the tuberculous animal by producing a tuberculin shock. This shock begins with an albuminuria and sometimes hæmaturia; it is followed by toxic myocarditis and pulmonary œdema. There is, however, no clear evidence to prove that the shock in tuberculous animals after an injection of sanocrysin is due to the destruction of tubercle bacilli and the setting free of endotoxins, which act as tuberculin acts on tuberculous animals. Another feature of importance in these experiments is that the cultures used were attenuated. The doses necessary to kill were enormous and many control animals failed to die or contract severe disease.

Hoyle and Dixon recently investigated two new types of gold compounds in tuberculosis. One of these is a complex aurous salt of ethylenethiocarbamide with the formula $(Au,2etu)H_2O$, where etu represents ethylenethiocarbamide.



'*Etu*'

This compound is stable, crystalline and colourless at ordinary temperatures. It is soluble in distilled water, forming a solution neutral to litmus and with a PH value of about 6.2. It was tested for therapeutic effects on both human and bovine types of infection. For the former, inoculations were made subcutaneously into guinea-pigs with 1-mgm. doses of a virulent human strain. All the animals, control and experimental groups, died within a few days of one another and all showed characteristic progressive lesions of similar extent. It was found that treatment with the gold compound in bovine disease in rabbits prolonged life about 50 per cent. when compared with controls. They adopted the arbitrary standard that treated animals should survive at least two or three times longer than the average length of life of the controls before clinical trial should be proceeded with.



Au *Gold Succinimide*

The second compound tested by Hoyle and Dixon was a complex gold derivative of succinimide, prepared by Sir William Pope. This compound is non-ionised and the gold is associated in chemical combination in an internal organic ring. It is a white, crystalline, stable compound at ordinary temperatures, readily soluble in water to a neutral solution. This substance was tested for therapeutic effect in experimental bovine infections in rabbits. In some animals this treatment was supplemented by injections of potassium iodide subcutaneously; in no case have any therapeutic benefits been observed.

Internal Secretions

The general outlook and significance of drug therapy was led into new channels when it was revealed that the animal body through these glands elaborates its own drugs, stores them generally at the seat of formation and doles them out to the tissues. There can be little doubt that in moments of excitement adrenalin is liberated in large amounts. The action of adrenalin is to raise the blood pressure by constricting peripheral vessels, to dilate bronchioles, to erect the hair, to increase the blood-sugar, to immobilise the alimentary canal. Ephedrine is closely related to adrenalin and has an action very similar to it; but ephedrine acts when taken by the mouth, whilst adrenalin is so easily oxidised that it is destroyed when administered in this manner; adrenalin causes pulmonary congestion by dilatation of the coronaries: ephedrine has no such effect.

A third active substance distinct from oestrin and corpus luteum is elaborated from the ovary and was described by Marshall and Dixon. This substance is water-soluble and thermo-stabile, and can be prepared from the ovary at one stage of its cycle only, by maceration with warm saline followed by boiling and filtering. The injection of this substance into animals causes a secretion of pituitrin. It is not suggested that the ovario-pituitary endocrine mechanism is the sole factor in producing labour pains. No doubt the fœtus itself acts as a direct stimulus, and without the fœtus the intense muscular contractions would not occur.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

Local Reports

ENGLAND AND WALES

Devon.—A meeting of the Pharmaceutical Committee was held at Exeter recently, Mr. W. W. Pine in the chair. Reports of the Central Checking Bureau were approved, and the secretary's action in notifying chemists of additions to and alterations in the drug tariff was approved. Another meeting was held on May 22. It was resolved to issue to chemists on the panel a report as drafted on the work of the Committee during its two years of office. At a meeting on June 10 the Insurance Committee adopted recommendations of the Pharmaceutical Service Subcommittee which had considered complaints. A chemist had been asked to exercise every care in future when large quantities of sodium bicarbonate were ordered. Another chemist was warned that he should not alter any prescription in future without consulting the medical man concerned, and a third chemist was cautioned as to the accuracy of his dispensing. It was stated that in two other cases chemists had committed breaches of agreements, and it was advised that £1 should be deducted from the remuneration of each. A report stated that the number of doctors and chemists on the Insurance Committee's list this year is 289 and 205 respectively, compared with 284 and 197 last year.

East Ham.—At a meeting of the East Ham Insurance Committee, recently, two cases arising out of test prescriptions were considered. In one instance it was reported that a prescription for eye lotion was prepared with tap water instead of distilled water. The Subcommittee considered that there was evidence of want of care in dispensing, and recommended that the firm be censured. In reply to a question, it was stated that the firm had been previously cautioned in respect of another branch shop. The recommendation was adopted. In the other case it was reported that there were deficiencies in the ingredients for a prescription, and the chemist involved was censured. It was reported that for the first quarter of 1929, 85,029 prescriptions were issued in respect of 56,049 persons, compared with 71,591 prescriptions for 55,814 persons for the same period of last year.

Herefordshire.—At a recent meeting of the Insurance Committee, a member protested against the fines imposed by the Pharmaceutical Service Subcommittee in cases of faulty dispensing. Five cases were outlined in the report for 1928, and in these fines of 10s. and £2 were imposed. Mr. E. Rowlands said that it was satisfactory to note that in three of the cases the Ministry of Health had supported the Subcommittee, and in the two other cases the Ministry withheld £1 of a £2 fine, and quashed the fine of 10s. Mr. S. A. Best protested that the Subcommittee was in the habit of imposing fines which were in excess of those imposed by other Insurance Committees. The chairman of the Subcommittee could only think in pounds, and the lay members of the Subcommittee invariably supported him. Mr. Rowlands objected to the remarks of Mr. Best, and said that the Subcommittee always dealt with the cases fairly and without prejudice.

Isle of Wight.—At a meeting of the Insurance Committee, held at Newport recently, it was reported that complaints had been received as to the illegibility of panel prescriptions, and it was resolved to ask the doctors to write prescriptions as clearly as possible. On the application of the Committee, the Ministry of Health had appointed an Advisory Committee to decide whether certain preparations were foods or drugs.

SCOTLAND

Glasgow.—The Burgh Insurance Committee decided to submit to the annual conference of the Scottish Association of Insurance Committees a resolution protesting against negotiations for the revision of medical benefit regulations being conducted independently of Insurance Committees. Discussion took place at a recent meeting on the question whether brandy, which had been prescribed with digitalis and nux vomica in a prescription, was a proper charge against the Committee's drug fund. The prescription had been passed by a Subcommittee. It was stated by several doctors that their practice when they considered that a panel patient required brandy was to ask him to obtain it separately. To allow brandy to be ordered as part of a prescription was creating a precedent. It was moved that approval of the minute be delayed until the opinion of the Department of Health was obtained, but the motion was defeated.

July Drug Tariff

THE following are the chief alterations for July in the Insurance Drug Tariff for England and Wales :—

Lower.—Acid. acetylsal. pulv., 1s. 2½d. per 4 oz.; acid. citric. pulv., 3s. 7d. lb.; aq. chlorof. conc., 6s. 9d. lb.; camphora, 4s. 2d. lb.; chlorodynum, 3s. 3d. lb.; collod. aceton., 1s. 1½d. per 4 oz.; collod. salicylic., 1s. 2½d. per 4 oz.; elixir diamorph. et terpin, 4s. 4d. lb.; ext. aloes pulv., 1s. 1½d. per 4 oz.; ext. cinchonæ liq., 4s. 6d. lb.; ext. colchici liq., 11s. lb.; ext. ipecac. liq., 2s. 4d. oz.; ferri et pot. tart., 1s. 4½d. per 4 oz.; hydrargyrum oleat., 1s. 4½d. per 4 oz.; inf. aurantii conc., 3s. 8d. lb.; inf. aurantii ex conc., 5d. lb.; inf. cascarill. conc., 1s. 4d. per 4 oz.; inf. cascarill. ex conc., 7d. lb.; inf. sennæ conc., 2s. 8d. lb.; inf. serpentariæ conc., 1s. 5½d. per 4 oz.; inf. serpentariæ ex conc., 8d. lb.; linct. diamorph., 2s. lb.; lin. album., 1s. 2d. lb.; lin. methyl. salicyl., 2s. lb.; liq. hydrogen perox. (20 vols.), 11d. lb.; liq. strych. hydrochl., 2s. 7d. lb.; methylsulphonal, 2s. 2d. oz.; ol. caryoph., 16s. lb.; ol. limonis, 23s. 6d. lb.; ol. olivæ, 14s. 6d. gal.; ol. ricini, 1s. 3d. lb.; pulv. amygd. co., 1s. 6d. per 4 oz.; pulv. catechu. co., 1s. 5½d. per 4 oz.; scammon. res., 1s. 6d. per 4 oz.; sodii salicylas, 4s. 3d. lb.; spt. ætheris, 6s. 3d. lb.; spt. æther. co., 9s. 3d. lb.; spt. ammon. aromat., 4s. lb.; spt. ammon. fetid., 7s. 9d. lb.; spt. camph., 6s. 4d. lb.; spt. rectificatus, 21s. 9d. pint; succus allii, 1s. 1d. per 4 oz.; succus scoparii, 2s. 7d. lb.; tr. asafet., 6s. 8d. lb.; tr. bryoniæ, 6s. 2d. lb.; tr. buchu, 1s. 5½d. per 4 oz.; tr. calumb., 1s. 2½d. per 4 oz.; tr. cantharidini, 7s. 6d. lb.; tr. carminativ., 10s. 3d. lb.; tr. chlorof. co., 5s. 10d. lb.; tr. cimicifugæ, 1s. 3d. per 4 oz.; tr. cinchonæ, 1s. 5½d. per 4 oz.; tr. gelsemii, 4s. 10d. lb.; tr. hamamel., 4s. lb.; tr. jaborandi, 1s. 1½d. per 4 oz.; tr. krameriæ, 1s. 4d. per 4 oz.; tr. lavand. co., 7s. 4d. lb.; tr. lobeliæ, 1s. 3d. per 4 oz.; tr. nucis vom., 4s. 8d. lb.; tr. opii ammon., 6s. 3d. lb.; tr. pruni virg., 1s. 3d. per 4 oz.; tr. pulsatillæ, 1s. 6d. per 4 oz.; tr. quillæ, 1s. 2½d. per 4 oz.; tr. senegæ, 7s. lb.; tr. stramon., 1s. 0½d. per 4 oz.; tr. strophanth., 8s. 3d. lb.; troch. kramer. et cocain., 1s. 4d. per 4 oz.; ung. calaminæ, 1s. 6d. lb.; ung. iodi denigres., 3s. 3d. lb.; ung. plumbi iod., 6s. 6d. lb.; vinum colchici, 3s. 9d. lb.; vinum pepsin., 1s. 4d. per 4 oz. Cotton wools: Boric, 1 oz., 2.0d.; 4 oz., 7.0d.; unmedicated, 4 oz., 5.1d.; 6 oz., 7.6d.; 8 oz., 10.0d.; 1 lb., 18.5d. Gauzes: Unmedicated, 1 sq. yd., 2.0d.; 6 sq. yds., 9.9d. Lints: Boric, 1 oz., 1.6d.; 2 oz., 2.8d.; 3 oz., 4.2d.; 4 oz., 5.3d.; 6 oz., 7.9d.; 8 oz., 10.3d.; unmedicated, 2 oz., 3.5d.; 3 oz., 5.2d.; 4 oz., 6.8d.; 6 oz., 9.8d.; 1 lb., 24.5d.

Higher.—Acaciæ gum. pulv., 3s. 9d. lb.; aloinum, 1s. 5d. oz.; argent. vitellin., 4s. 9d. oz.; ext. cannab. ind., 4s. 8d. dr.; lin. methyl. sal. co., 7s. 6d. lb.; liq. bromidi co., 7s. 9d. lb.; salol, 8d. oz.; tr. cannab. ind., 30s. lb.; tr. colchici, 6s. 6d. lb. Gauze, unmedicated, ¼ sq. yd., 0.8d.

AMENDMENT OF THE DRUG TARIFF

The following preparation, in the sizes indicated, will be included in the Drug Tariff as from October 1, 1929 :—

CATAPLASMA KAOLINI B.P.C.

(To be supplied in lever-lidded tins)

	s.	d.
¼ lb.	0	6 each
½ lb.	0	10 each
1 lb.	1	5½ each

The prices specified are those in force during July. They are subject to the fluctuations of the market.

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, August 8

BUSINESS since our last report has been interrupted by the holidays, and since the re-opening of the markets this week the tone has been subdued all round. About the only change in crude drugs is a sharp advance in Matto Grosso ipecacuanha due to a better demand, and still higher prices are predicted. Cod-liver oil has a firmer tendency. Senega is unchanged. Sudan acacia is firmer, and consumers appear by no means to be fully covered. Tragacanth of the lower grades has been in fair demand at easier prices. Aromatic seeds are mostly unchanged, about the only alteration being a further reduction in coriander for shipment. Mustard seed is slightly firmer. Pharmaceutical chemicals remain as last week, with the exception of foreign cream of tartar and tartaric acid, which are both slightly dearer. The industrial chemicals market has been overshadowed by the holidays and the cotton trade trouble, and the bulk of prices are as last week. Carbolic acid crystals continue firm and active on a further slight advance. The fixed oils have been under the influence of the holidays. Acid oils, ground nut and palm kernel continue firm. Linseed oil is slightly cheaper and turpentine easier on the spot, although rather dearer forward.

Higher	Firmer	Easier	Lower
Ammonia sulphate (export)	Carbolic acid crystals	Caraway oil (Dutch)	Cloves (Zan.)
Cream of tartar (foreign)	Citronella oil (Jv.)	Castor oil (Eng.)	Coriander seed (c.i.f.)
Gum acacia	Cod-liver oil	Tragacanth	Resin
Ipecacuanha (Matto Grosso)	Mustard seed	Turpentine	Rubber
Shellac	Tartaric acid (foreign)		
	Wood oil (Hankow)		

Crude Drugs, etc.

ALOES.—Curaçao, in cases, remain very firm, the c.i.f. value for t.q. being about 115s. per cwt. Stocks on spot are very small as importers have refrained purchasing owing to the high prices. New York "Drug Markets," dealing with the position, states :—

In the primary market labour has been almost completely displaced by the entry of a large petroleum refining plant into the territory. This refinery is paying higher wages and giving steady employment. The women and children who might substitute for the men in the gathering of aloes, are not inclined to work since the men folk now have plenty of money. There is stated to be about 1,000 cases now in the primary market which are held at 22 c. per lb. at the source. The spot market (New York) is bare of supplies, and goods entering the country immediately pass into the hands of consumers. There is very little likelihood of a change for some time to come, and, in fact, at the moment there is nothing to indicate that a change will ever come. The only thing that will stimulate production will be the offering of still higher prices to the natives so that some of them at least will be induced to resume production of aloes rather than work in the oil refinery.

BISMUTH.—Despite the disturbances in the trade for bismuth salts and rather keen outside competition either in these or the metal itself, there has been no alteration in the Bismuth Syndicate's price, which is still 7s. 6d. per lb. for at least five-cwt. lots.

CASCARA SAGRADA remains firm and unchanged at 55s. per cwt. c.i.f. for new crop to arrive.

CLOVES are dull and easier, Zanzibar offering at 1s. 2¼d. lb. on the spot, July-August shipment at 1s. 1½d. and for August-October 10d. c.i.f. has been paid. The landings of Zanzibar in London during the week ending August 3 were ten and the deliveries 51, leaving a stock of 1,855, against 5,212 in 1928 and 12,188 in 1927; the stock of Madagascar is 411. The landings of Zanzibar to date have been 5,034, against 12,299 in 1928, and the deliveries 5,566, against 14,768 in 1928.

COCOA BUTTER.—At auction in Amsterdam 27 tons Van Houten's HA sold at 73.52 cents per half-kilo, and 250 tons A at an average price of 68.50 cents.

COD-LIVER OIL, although quiet, has a firmer tendency and most of the Norwegian makers have increased their prices during the past few days, agents in London quoting from 102s. 6d. to 105s. per barrel c.i.f. for finest new Lofoten non-congealing steam-refined oil.

ERGOT.—New crop Spanish is quoted at 2s. per lb. c.i.f. to arrive.

GALLS.—Small sales of Persian blue have been made at 52s. 6d. per cwt. on the spot, with further buyers.

GINGER.—West African is quiet at 63s. per cwt. on the spot, and to arrive sellers quote 62s. 6d. c.i.f. Jamaica is quoted at 80s. for small grinding up to 100s. for medium bold and 120s. for selected quality; fair washed rough Cochin is 75s. spot.

GUM ACACIA is firm and dearer. Kordofan natural has sold up to 100s. to 105s. per cwt. on the spot, and cleaned up to 110s. To arrive, the sales include natural at 93s. to 100s. c.i.f., and cleaned at 100s. New crop for December-January shipment has been sold at 74s. to 75s. c.i.f. for natural and 77s. 6d. to 80s. c.i.f. for cleaned. Talha is quoted at 50s. c.i.f. Natural Mamtour (rain-damaged) has been sold at 87s. 6d. c.i.f. Bleached on the spot is 130s. to 150s. per cwt. Of Persian so-called insoluble Shiraz cleaned, supplies are short and offers few, with small spot stocks; August-September shipment is quoted at 62s. 6d. c.i.f.

The stock of acacia gums is 3,494 against 8,598 in 1928 and 8,519 in 1927; landings to July 31 have been 11,941 and deliveries 13,636.

IPECACUANHA.—Matto Grosso is very firm and held for higher prices, as the result of the placing of a number of fair-sized orders recently, and the rates now asked vary from 14s. to 14s. 6d. per lb. The position of Minas is also higher and 13s. to 13s. 6d. is now asked on the spot. At present it seems impossible to buy anything for direct shipment from the source of origin at anything like reasonable prices, and generally a still higher market is predicted. Cartagena is quoted at 12s. 6d. c.i.f. to arrive.

The landings of Matto Grosso in London during July were 48 bales and the deliveries 29 bales, increasing the stock to 135 bales.

MENTHOL is inactive, with spot sellers of Kobayashi-Suzuki at 19s. 3d. per lb.

MERCURY.—The position is much the same as before, being very steady, but quite uninteresting, simply because of the pegged price policy pursued by the larger importers on this side on the basis of £22 2s. 6d. to £22 5s. per bottle, less the customary discount. On their side, first-hand sellers stand as before on the basis of £21 15s. per bottle, f.o.b. either Spain or Italy. In the absence of any important increase in the imports, available stocks are being steadily drawn upon, which in itself is not likely to induce concessions, in spite of the strictly hand-to-mouth policy pursued by home buyers. There is a continuous fair export trade doing, chiefly for the Far East.

OPIUM.—The following report has been received from Turkey :—

CONSTANTINOPLE, July 31.—During the past fortnight arrivals were as follows:—Druggists', 358; "softs," 159; and Malatia, 49 cases. Sales included 124 cases druggists' at £T32-40, 47 cases "softs" at £T36-40, and 3 cases Malatia at £T31-40 for oke. Stocks totalled: Druggists', 673; "softs," 127 and Malatia 90 cases. The corresponding stocks last year were 1,115, 133 and 97 cases respectively. The position is firm, and a demand for 300 cases for the Dutch E.I. Government has excited the speculators, who are already speaking of unheard of prices. The morphine content is from 15 to 20 per cent. less this year compared with the average for previous years, and as holders are fixing the prices on the basis of whatever they want them to be, the only hope of more moderate prices ruling will be a great reduction in consumption.

PEPPER has been quiet and slightly easier. Fair black Singapore is 1s. 4d. per lb. on the spot; June-August shipment, 1s. 1¾d.; October-December, 1s. 1¾d. c.i.f.; Lampong, 1s. 4½d. spot; August-October sold at 1s. 1¾d.

to 1s. 1½d. c.i.f.; and October-December at 1s. 1⅝d. c.i.f. Tellicherry and Alleppy, 1s. 4d. spot. White Muntok, 2s. 4¾d. spot. June-August has been sold at 2s. 1¾d. c.i.f.

RUBBER is easier and ¼d. to 5/16d. per lb. lower on the week. The demand, owing to the holidays, is very slow, and most of the leading consumers have shut down for the week. New York cables report a slow market, with little interest being shown. In spite of the quiet tone, there is very little pressure to sell, and most holders are quite firm. Last week arrivals totalled 2,028 tons, whilst deliveries were 1,258 tons, showing an increase of 770 tons in the stocks. The London stock now stands at 30,937 tons, against 34,294 tons at the corresponding period last year. Quotations (Wednesday, 5 p.m.): No. 1 standard ribbed smoked sheet spot and August 10⅞d., September 11d., October-December 11¼d., January-March 1930, 11½d. per lb.

SEEDS.—ANISE.—Spanish, 67s. 6d., and Russian 28s. 6d. per cwt. on the spot. CANARY is unchanged. Mazagan on spot is 25s. 6d., and for new crop, August-September shipment, 24s. per cwt. c.i.f. is quoted. Saffi is 25s. spot, and new crop is 23s. 6d. c.i.f. for August-September shipment. CUMIN remains firm on spot at 70s. for Malta and Morocco. The c.i.f. price for Morocco is 62s. 6d. for August-September shipment. CORIANDER for shipment is again lower. Shippers are now quoting 10s. 6d. c.i.f. for August-September shipment. The spot price is 11s. 6d. per cwt. FENUGREEK remains about the same at 17s. 3d. c.i.f. for August-September shipment. LINSEED on the spot is 23s., and for new crop, August-September shipment, business has been done at 22s. c.i.f. FENNEL is quiet, with sellers on spot at 67s. 6d. and 60s. c.i.f. for prompt shipment. MUSTARD is a little firmer, with business passing at 28s. 6d. to 34s. per cwt., according to quality. Dutch CARAWAY for prompt shipment is quoted at 39s. per cwt. c.i.f., and for new crop for October-December shipment a premium of 3s. is asked.

SENEGA remains unchanged at 4s. 2d. per lb. c.i.f. and at 4s. 9d. on the spot.

SHELLAC is firmer, usual standard TN orange quality closing at 205s. per cwt. on the spot; fine orange, 230s. to 300s.; pure button, 235s.; AC cakey, 202s. 6d. Sales to arrive include TN for August-September shipment at 188s. c.i.f., closing sellers at 192s. c.i.f. For delivery August has been sold at 192s. to 200s.; October, 196s. to 205s.; and December, 200., closing sellers at 208s.

TRAGACANTH.—During the past few weeks there has been a steady business and the lowering of prices of inferior grades by importers has attracted buyers. Medium and better grades are still in short supply and several orders have had to be refused on that account. No. 1 fine white ribbony is £29 to £30 per cwt.; seconds, £24 to £26; thirds, £20 to £23; fourths, £15 to £18; medium bold to thin Persian leaf, £10 to £14; ordinary to medium yellow thick Persian leaf, £8 to £9 10s.; hoggy mixed to clear yellow sorts, 80s. to 140s.

Essential Oils

BUSINESS in essential oils has shown signs of the holiday influence, and practically nothing has been passing. Prices show little change, though Continental distilled clove oil and caraway are both lower. Lemon is on the easier side. Sicilian and West Indian orange are unchanged. Java citronella and wormseed are very firm, and it is expected that the latter will go higher owing to crop curtailment.

ANISE (STAR).—" Red Ship " in leads in cases is 3s. 1d., tins in cases 3s., and drums 2s. 9d. per lb. on the spot. The forward prices are unchanged.

BERGAMOT is quoted unchanged at 17s. 6d. to 18s. on the spot, and to arrive at 17s. 4d. per lb. c.i.f.

CAMPHOR—Spot supplies are still scarce, and the prices quoted are nominal. There is difficulty in getting ample shipments from Japan.

CARAWAY.—Double distilled Dutch is quoted at 8s. 3d. per lb., and slightly less for quantity.

CASSIA.—Quotations remain unchanged since last week. For 80-85 per cent. 4s. 9d. per lb. in leads on the spot, and for shipment drums at 3s. 11d. c.i.f., and leads in cases at 4s. 2d. c.i.f.

CITRONELLA—Java citronella continues very firm, and prices quoted for shipment are drums 2s. 7d. per lb. c.i.f., and in larger quantities at 2s. 6d. Ceylon is without further development at prices prevailing recently. Spot 2s. per lb., and for shipment 1s. 9d. c.i.f.

CLOVE is rather lower for Continental distilled. B.P. 90-92 per cent., 8s. 6d. per lb.; other grades at 7s. 6d. to 8s. 3d. English drawn oil is offered at 9s. per lb. on the spot

CUBEB is quoted at 13s. per lb. for foreign distilled.

GINGERGRASS is quoted on the spot at 9s. per lb., and for shipment at 8s. c.i.f.

GUAIACWOOD is quoted on the spot at 6s.

LAVENDER.—Prices may be firmer, as it is believed that the French lavender crop will be short on account of the dry summer of 1928 and damage done by the mistral last December.

LEMON.—Spot prices are unchanged at 15s. to 15s. 4d., but the market is on the easy side, owing to plentiful spot supplies. Hand-pressed oil is quoted at about 16s.

LEMONGRASS.—For forward shipment at 2s. 7d. per lb. c.i.f. and 2s. 9d. on the spot.

ORANGE.—Silician and West Indian oils are steady. West Indian is quoted on the spot at 17s. per lb. and 16s. per lb. c.i.f. Sicilian at 17s. 6d. to 18s. on the spot and to arrive at 17s. c.i.f.

PALMAROSA remains at 11s. 9d. per lb. spot, and 11s. for shipment c.i.f.

PATCHOULI.—Spot price is quoted at 22s. 6d. and to arrive 21s. 6d. c.i.f. The position is firm, and prices may go higher on account of increased costs of production.

PEPPER.—Dutch distilled pepper oil is quoted at 33s. per lb.

PEPPERMINT.—American peppermint is quoted at 14s. 10½d. to 15s. per lb. on the spot, and to come forward at 15s. 3d. c.i.f. for new crop. Japanese dementholised is quoted at 6s. 4½d. for Kobayashi-Suzuki on the spot and at 6s. 3d. per lb. for outside brands. H.G.H. is quoted at 18s. 9d., and for shipment 18s. 6d. c.i.f.

SPEARMINT—The spot quotation is 18s. 6d. per lb., and to come forward at 17s. 6d. to 19s. per lb. c.i.f., according to seller. A firm undertone prevails on the American side, and the higher price may be asked.

WORMSEED (CHENOPODIUM) is still very firm at 12s. 3d. c.i.f. to arrive, and prices are expected to go higher. The recent advance is due probably to curtailment of crop, as growers are reported to have abandoned the cultivation owing to previous unremunerative prices.

The following arrivals have taken place from the countries indicated during the period July 10 to July 16 (inclusive): Anise (Fr.), 5 cs.; bergamot (It.), 32 cs.; camphor (U.S.), 1 dm.; cananga (Jav.) 3 dm., (Neth.) 1 dm.; cassia (H.-Kong), 15 cs.; cinnamon (Ger.), 1 cs.; citronella (Jav.) 8 dm., (Cey.) 3 dm.; clove (Brit. Ind.) 2 dm., (Ger.) 1 dm., (Madag.) 2 dm.; eucalyptus (Aust.) 22 cs., (Sp.) 4 cs.; geranium (Fr.), 4 dm.; grapefruit (U.S.), 1 cs.; juniper berry (Cz.-Sl.), 1 cs.; lemon (It.) 140 cs., (U.S.) 2 dm.; lime (Br. Gui.) 1 cs., (Ger.) 1 cs.; mandarin (It.), 10 cs.; orange (Fr.) 2 cs., (It.) 1 cs.; peppermint (Jap.) 22 cs., (U.S.) 1 dm.; rosemary (Sp.), 1 dm.; thyme (Sp.), 1 dm.; undescribed (Neth.) 1 cs., (Fr.) 7 cs.

The following arrivals have taken place from the countries indicated during the period July 17 to July 23 (inclusive): Bergamot (It.) 11 cs., (U.S.) 8 cs.; cedar (Kenya Col.), 4 dm.; clove (Ger.), 1 dm.; eucalyptus (Aust.), 6 dm.; lavender (Sp.) 1 dm., (Fr.) 2 cs.; lemon (It.), 85 cs.; orange (U.S.), 3 cs., (B.W.I.), 10 cs.; peppermint (U.S.), 7 cs.; pimento (B.W.I.), 2 dm.; pine (Ger.), 24 dm.; rose (Fr.) 1 cs., (Brit. I.) 3 dm. (Fr.) 1 cs.; rosemary (Sp.), 1 cs.; sandalwood (Aust.), 130 cs.; spearmint (U.S.), 1 dm.; undescribed (Fr.), 4 cs., (Neth.) 1 cs., (Sp.) 1 cs.

Pharmaceutical Chemicals, etc.

THIS market continues subdued owing to the holidays, and prices, with the exception of foreign cream of tartar and tartaric acid, are unaltered. The former is very firm, with a further advance in foreign, which is now quoted at from 100s. to 102s. 6d. per cwt. net for B.P. powder 99 to 100 per cent. Tartaric acid (B.P. crystals) continue in limited demand, with prices for foreign slightly dearer at from 1s. 4½d. to 1s. 5d. per lb., less 5 per cent.

Industrial Chemicals, etc.

London, August 7.

CONDITIONS in this market have been quiet over the holidays with prices practically all unchanged. ARSENIC.—The market has been stationary for a good while past, and this will probably continue unless there is an extension in the demand beyond the limited buying going on which is being effected at £16 per ton f.o.r. mines for 99 per cent. white Cornish. Mexican high-grade is still offered at £16 10s. c.i.f. Liverpool. CADMIUM.—Demand has been quieter over the holidays and there is an ample supply available, but prices are well held by Australian and Canadian agents ranging from 4s. for good-sized lots up to 4s. 1d. per lb. for small parcels. COBALT.—The demand for metal has been quieter of late, but the official price remains at 10s. per lb. Oxides are steady, being quoted at 8s. for black and 8s. 10d. per lb. for grey. The total export of Canadian cobalt for twelve months to March 31 last amounted to 261,548 lb. against 338,526 lb. in the corresponding previous twelve months. Of that total about 120,000 lb. came to this side and 110,000 lb. to the United States. COPPER SULPHATE.—Although there has been a renewed advance in the price of rough bar copper, sulphate manufacturers have done little so far in providing for their requirements against the coming season, while the outlet for their product is still very limited and a revival of buying is not expected yet awhile. The British Makers' Association quote about £27 10s. per ton f.o.b. for casks, less 5 per cent., but this is probably quite nominal. Offers are still being made by foreign makers from old stock at substantially below that figure. MAGNESIUM.—Home makers' prices are steady and the position is well under control. Quotations for small sticks, ingots or bars range from 3s. 3d. to 3s. 9d. per lb., according to specification; ribbon sells at 11s. to 14s., wire at 7s. 6d. to 11s. 6d. and powder at 4s. 6d. up to 7s. 6d. per lb., according to quality and quantity. SELENIUM.—Current supplies are being steadily absorbed and high-grade black powder is worth 7s. 8d. to 7s. 9d. d/d Liverpool ex-warehouse. SULPHUR.—There is a steady demand both for American crude and Italian refined. The former 99 per cent. is quoted at £5 12s. 6d. to £5 17s. 6d. and Sicilian flowers are priced at £12 7s. 6d., refined ground at £11 and roll at £9 15s. all c.i.f. to arrive. AMMONIUM SULPHATE for export is dearer; 20.60 per cent. nitrogen for August shipment is £9 5s. 3d. per ton packed in double bags and £8 15s. 9d. in single bags f.o.b. U.K. Home trade August-September is £9 9s.

COAL TAR PRODUCTS.—Carbolic acid crystals (39° to 40° C.) continue firm and active with a further slight advance in price; f.o.b., or carriage paid, 7¾d. to 8d. per lb., in drums with over-casks; crude carbolic 60's, 2s. to 2s. 1d. per gallon, naked at works. PITCH is being maintained at the recently advanced prices. Other items continue unchanged.

Fixed Oils, etc.

OVER the holidays these markets have been rather sluggish. Acid oils, ground nut and palm kernel continue firm. Linseed oil is slightly cheaper. Turpentine is quiet and slightly easier. LINSEED OIL (raw, naked).—On spot, 37s. ex mill; August, 35s.; September-December, 34s. 6d.; January-April, 34s. 3d. Boiled oil, spot, 41s. 4½d. Hull: spot, 38s.; August, 36s. 9d.; September, 36s. 3d.; October, 36s.; September-December, 35s. 9d. WOOD.—Hankow is dull at 76s. per cwt. nominally; August-September shipment, 73s. c.i.f. CASTOR is slightly easier, pharmaceutical offering at 49s. 6d. per cwt., first pressing at 45s., seconds at 42s. in barrels net ex Hull in not less than one-ton lots. TURPENTINE.—The market has been quiet, with no new feature, under a generally restricted demand, partly owing to the holidays, but the undertone was fairly steady at the small decline. The London spot market closed at 42s. 6d. per cwt. on the spot and September-December delivery at 42s. 6d. The low stocks compared with a year ago are looked upon as a steadying factor. Last week's deliveries were quite good at 2,035 barrels, which makes an aggregate of 59,082 barrels, against 64,734 barrels the same period last year. Stocks fell to 11,595 barrels, which with 8,200 barrels afloat makes the London visible supply 19,795 barrels, as compared with 33,017 barrels a year previous. RESIN.—The market declined somewhat, despite the reduced stocks for the time of year. C.i.f. quotations for American were as follows: B 17s. 9d., D 17s. 10½d., E/K 18s., M/N 18s. 3d. to 18s. 7½d., W.G. 18s. 10½d., and W.W. 19s. 9d. per cwt. French W.W. stands at 19s. 1½d. c.i.f. for prompt shipment. LUBRICATING, MINERAL, BURNING OILS, ETC.—There is no change of importance to record. Lubricating oils are still unsteady.

Bulgarian Rose Oil Exports

ACCORDING to the returns published by the General-Direction of Statistics, Sofia, exports of rose oil from Bulgaria during February 1929 amounted to 22 kilos, valued at 1,666,639 leva, consigned to the following countries: Germany, 14 kilos; Rumania, 100 grams; United States, 30 grams; France, 7 kilos; Czechoslovakia, one kilo. During the period January-February 1929 the total exports amounted to 56 kilos, valued at 4,219,562 leva.

German Bromine Convention

THE German Bromine Convention, which was extended for one year when it expired on January 1, 1929, gives evidence of being dissolved on expiration of the present agreement. Advance notice of three months must be given by a member intending to withdraw. Discontent with current quotas for some of the large producers has developed because their output has automatically increased with the extension of production of other co-products, including potassium sulphate and magnesium chloride.

Egyptian Drugs for U.S.A.

THE exports to the United States during 1928 of the principal Egyptian gums, waxes, and crude drugs produced and collected in Egypt showed large increases, as will be noted in the following table:—

	1927		1928	
	Lb.	Dols.	Lb.	Dols.
Beeswax ..	110,000	43,000	193,000	71,400
Colocynth pulp	22,600	6,300	120,000	37,000
Gum acacia ..	4,652,000	287,000	9,200,000	580,000
Henna ..	104,000	7,300	198,000	16,000
Senna ..	1,111,600	71,000	1,171,750	85,550

This trade is in the hands of not more than five or six important Egyptian exporters.

Trade Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1929, p. 333.

(From "The Trade Marks Journal," July 10, 1929.)

"EAU DE COTY Ex-Eau de Cologne Cordon Rouge" on pictorial label device; for Eau de Cologne made in France (48). By Coty (Société Anonyme), 23 Place Vendome, Paris. 490,884. (Associated.)

"PIXY"; for toilet articles (48). By Yardley & Co., Ltd., 105 Carpenter's Road, Stratford, E.15. 498,504.

Square designs of fancy bottles; for perfumery, etc. (48). By Heppells, Ltd., 16 Grosvenor Place, London, S.W.1. 502,565/566. (Associated.)

"SILFIXA"; for a silvering solution (50). By Crown Chemical Co., Ltd., 120 Victoria Street, London, S.W.1. 503,158.

(From "The Trade Marks Journal," July 17, 1929.)

"COLARDO" under fantastic figure; for chemicals (1). By Colardo Products, Ltd., 57 Western Road, Reading. 502,386. (Associated.)

"DOLLY VARDEN"; for dyes (1). By Wm. Edge & Sons, Ltd., 50 Raphael Street, Bolton. 503,650. (Associated.)

"BATTERIUM"; for chemicals (1). By W. Haddon, 132 Salisbury Square, Fleet Street, London, E.C.4. 503,796.

"TETRAFORM"; for a veterinary anthelmintic medicine (2). By The British Drug Houses, Ltd., 16-30 Graham Street, City Road, London, N.1. 503,302. (Associated.)

"MISPEP"; for a medicine for stomach ailments (3). By C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, London, E.C.2. 502,768.

"OSNOLA"; for medicinal chemicals (3). By J. Nathan & Co., Ltd., 16 St. Helen's Place, London, E.C.3. 503,106 (Associated.)

Correspondence

Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

Easy Prescribing

SIR,—In common with your correspondent "Krites" (*C. & D.*, August 3, p. 151) we are also suffering considerably from the practice of the prescribing of proprietary articles, often with the footnote "in orig. package." The foolishness of this is shown by the customer generally asking for the article by name on all subsequent occasions. I need hardly point out the loss of profit suffered by the absence of all dispensing charges. In a large dispensing business we find very few pills, cachets or suppositories ordered, and mixtures seem to be the only thing left. Few chemists realise the enormous loss caused to them by the D.D. Act. Cocaine and heroin in perfectly harmless quantities can no longer be repeated, and the consequence is that we are losing all along the line. Only to-day we were shown a bill from perhaps the largest of the stores, where 3s. had been charged for two gross of a certain proprietary pill, and our charge, 5s. 6d., was declared an imposition. What can be done? Returns are certainly increasing, but the ratio of profit has been on the down grade for the past five years. The cutting of dispensing is made the bait for securing the general and fancy section of our business, with the result that many of the best family businesses are passing into the hands of the multiple shop companies, and are being carried on, in many cases, under the old name. This—which I believe is against the law—should be stopped, and I have corresponded with the R.P.U. on the matter.

Yours, etc.,

T. W. CLEAVE.

Blackheath, S.E.

Stamped Proprietaries and Postages

SIR,—In reply to "Postal" (*C. & D.*, July 20, p. 97), one is tempted to argue that if the public will buy patent medicines they must pay the tax on them as for any other luxury; while as to postage, if one orders through the post naturally one expects to pay the cost of the article, *plus* the postage, for the convenience. But would a reduction in the patent-medicine stamp duty be of any real value to the chemist or to the public? If there were a reduction it could be assumed that it would be back to the old rate of 1½d., and as many proprietaries are now charged at 13s. or 13s. 4d. for the 1s. 3d. size it is a certainty that with the reduction the wholesale rate would become 12s., retailing at 1s. 1½d.; although the customer would gain the 1½d., which most people would not worry about, the retailer would lose a further percentage of his meagre profit. And it is not likely that the small turnover would be greater because of reduction.—Yours, etc.,

STAMPEDON (30/7).

Restriction of Photographic Supplies

SIR,—In your issue of the *C. & D.*, August 3, p. 151, Mr. H. Dutton, Manchester, writing on "The Coupon Cameras," states that the British film manufacturers are introducing their goods into any kind of shop. Being on the Council of the Photographic Dealers' Association, I wish to contradict this statement and refer Mr. Dutton to Mr. Clarke's letter on "Sale of Films" on the same page. I am sure Mr. Clarke would only be too glad to send Mr. Dutton also a copy of the current issue of the "P.D.A. Journal" if he will trouble to write for the same.

Yours faithfully,

Hull. S. T. KIRTON.

SIR,—I should like to support most heartily the remarks of your correspondent, Mr. H. Dutton, *re* the above (*C. & D.*, August 3, p. 151). I have had many arguments with the representatives of those firms associated with gift schemes. They may help to sell the cigarettes, etc., but have killed the box camera trade, from my point of view. I do not find any proof that the sale of films has increased, and now that we have a company store doing the sixpenny film this adds to the losses of the real dealer. Further, most of the "6d. film" people have not the cheek to bring their D. and P. to us, but the company store gets that as well—and does it at a cut price. Though I believe the Photographic Dealers' Association have done a lot to check the photographic trade getting into the hands of all and sundry, yet even that association will never prevent Tom, Dick and Harry advertising themselves as photographic dealers, while supplies of popular brands of materials are obtainable through many sundry wholesale houses. This is still going on, much more than one thinks, and even the accredited dealer himself is at fault in some cases by supplying any old stallholder with films on a sales-commission basis. As your correspondent points out, the sale of a camera by a keen and genuine dealer creates a goodwill with the customer, which no gift scheme could produce. I do not find that many (if any) gift-camera users are a bit interested in the little side-lines which we dealers often introduce to our clients, and thereby anticipate creating mutual benefits. It would be interesting to know if there are dealers who have really been able to trace extra trade from these coupon schemes.

Yours faithfully,

Winchester. F. B. HEATHCOTE WRIDE.

SIR,—I must thank Mr. F. Clarke for his letter (*C. & D.*, August 3, p. 151). On p. 23 of the July issue of the "P.D.A. Journal," to which he refers, there is an article by a manufacturer, who instances the possibility of a stationer stocking films—this is not unusual, if not a stationer, then a tobacconist or some other shop; if we see such a display are we to report it to the P.D.A.? The ordinary dealer cannot judge whether this shop has obtained its supplies in a legitimate or an illegitimate manner; but when he sees such a display in a shop where he has not noticed them before, and where there are two or three established dealers already in business in the same locality, naturally he wants to know why; but the man who is running a small retail business has not the time or facilities for investigation, with the added risk of complaining without cause. Although the Proprietary Articles Trade Association has been in existence for so long, we are still troubled with the domestic stores which sell protected lines at cut prices, and, so far, we have not been able to find a means of dealing with them; we do not want history to repeat itself, and we do not want the same situation to arise in the case of photographic materials. In the same article the manufacturer says that dealers should stock and show all the films of those manufacturers who are members of the Federated Photographic Manufacturers' Association, while in the second half of the same article, written by a dealer member of the subcommittee, it is stated that there are about fifteen to twenty makes of roll film on the market. I have not a list of the manufacturers by me to see how many of these makers are members, but if there were only a dozen it is impossible for the ordinary dealer to keep a stock of one dozen different varieties of films, and so we open the way at once to the charge of insufficient representation. Then, again, the bazaar traders are selling a four-exposure film at 6d., and catering for the D. and P. work at half the P.D.A. list prices; are we going to do anything to compete with them, or are we to fall into the same situation as has arisen with regard to toilet goods, where all the face creams, tooth-pastes, etc., are being packed in sixpenny sizes for this market? Whatever dealers may think of this sixpenny trade, the greater bulk of the public are sure to shop in the cheapest market, and we shall have to face it sooner or later. I do not offer these remarks in any spirit of hostile criticism, but merely in an endeavour to show how it appears to the ordinary small dealer, and to try to point out the difficulties that are sure to arise unless some method can be devised to obviate them.

Yours faithfully,

AUGEAN (5/8).

Business After Closing Time

SIR,—"After Hours" (*C. & D.*, July 20, p. 98) has come up against the problem that we all meet some time in our careers, and one which became acute with myself nearly twenty years ago. Being young and enthusiastic, and anxious to create a reputation for service, I answered the bell at all hours; but I soon found that instead of creating a service I had created a general convenience for use of the telephone, change for a sovereign, filling cameras with customers' own plates, obliging with stamps—in short, nearly every kind of demand except for urgent medicine. This kind of thing went on until it was depriving me of absolutely essential rest, so I decided that it had to be cut out and I had a notice printed with the hours of business on it; the shop was closed definitely at the stated hour, the bell done away with, and the members of the household were instructed that there was to be no more answering the door after hours. I cannot see that it has made the slightest difference to normal business, so I advise "After Hours" to do the same. I am aware that some pharmacists will say that we have our professional status to consider; but in my district the doctors do every kind of business and are never likely to send me a customer, even after hours.—Yours truly,

RESTFUL (29/7).

Unordered Goods

SIR,—As shown by one of your correspondents (*C. & D.*, August 3, p. 152), the dumping of unordered goods is being revived, and I am surprised to learn that during this past month two firms of repute have been guilty of this indiscretion. The *C. & D.* can take credit for putting a spoke in the wheel of this unpleasant business some time ago, and reference to your correspondence columns of July 16 and July 23, 1921, together with the support of "Xrayser II" on the latter date, is of interest. Although I retired from active proprietorship three years ago, I have still a bit of kick left in me.

Yours truly,

THOS. POSTLETHWAITE.

March.

Small Orders

SIR,—May I say in reply to Mr. Milner (*C. & D.*, July 27, p. 127) that naturally I do have customers who spend more than penny at a time? But I find that the tendency of the average customer now is to purchase the smallest quantity obtainable, and if not from myself, then from some other shop. During the war period and the years following it the lowest quantity sold of small items, such as liver pills, was twopennyworth; but latterly, and particularly in the last two years, the disinclination of many customers to spend more than a penny at a time, the rapidly growing keenness of competition, the opening-up of new pharmacies in districts already well served, the increasing piracy of our trade by retailers of every denomination and the lowering of turnover due to the reduction in prices of many advertised lines have all induced, or perhaps compelled, chemists to cater for even the penny trade. I am not sure that a refusal to sell less than threepennyworth would have a beneficial effect. I set my face against penny trading for a long time, but the result was that customer after customer refused the packet and walked out to go over the road and spend their pennies, so there was nothing else to do but to swallow one's dignity and serve them. Before the war I once worked as an assistant to a pharmacist whose business had been built up on dispensing and own lines, and nothing was served under 3d.; but with a changing population and the introduction of modern stores into the town he gradually lost the old customers, and the new ones considered him too dear, with the result that the business went down to a shadow of its former prosperity. Mr. Milner says that the time is ripe for a general understanding on this point. We are nearly all agreed, but there is always "the man who won't."

Yours truly,

PENNY WORKER (29/7).

Legal Queries

J. W. N. (11/6) has bought a business without having the stock taken. He now finds that the value of the stock is much below that advertised, and also that the takings are only about half what they were stated to be. What course should he adopt? ["J. W. N." should consult a solicitor. If the purchase of the business was induced by misrepresentation on the seller's part, "J. W. N." may be able to get the contract rescinded by the Court, or, alternatively, recover damages from the seller.]

H. R. N. (21/5) proposes to keep a branch shop open on Thursdays, which is the local early-closing day. One assistant only will be employed, and he has his half-day's holiday on Mondays. Will it be permissible to do this and to sell such goods as films, fancy goods and other sundries? [It is permissible for "H. R. N." to elect to close the branch on Saturdays, instead of Thursdays, and to keep open on Thursdays for the sale of all classes of goods. In that event, the branch must be closed except for the sale of medicines, etc., on Saturdays.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

C. B. (5/7).—CUTICLE SOLVENT.—The following formulas should suit your purpose :—

Cuticle Remover

Caustic potash	1 part
Glycerin	10 parts
Water	40 parts

Mix and perfume as required.

Cuticle Skin Cream

Petroleum jelly, pale yellow ...	1½ oz.
Deodorised coconut oil	1 oz.
Hard paraffin	1 dr.
Stearic acid	2 dr.
Lanolin hydrous	1 dr.
Water	2 dr.
Borax	5 gr.

The natural heat of the body readily softens the coconut oil when applied; this oil quickly softens the hard skin, allowing it to be easily wiped away with a soft cloth.

H. F. (19/88).—EFFERVESCING DRINK.—The following is one of the recipes given in the new edition of "Pharmaceutical Formulas" under the title of

Lemon Kali or Sherbet

Pulv. sacch. alb.	lb. iv.
Pulv. acid. tart.	lb. ij.
Pulv. sodii bicarb.	lb. ij.
Ol. limonis	ʒij.

A water-soluble aniline dye could be used for colouring purposes.

Retrospect of Fifty Years Ago

Reprinted from
The "Chemist and Druggist," August 15, 1879

Reports of Council Meetings

Mr. Symes moved the following resolution: "That when any matter is considered in Committee during the Council proceedings a record of the fact be stated in the Journal report of the Council proceedings, except under some special circumstances where the Council by vote decide that it is undesirable." He wanted to see everything that took place in committee reported in name, though not in detail, leaving, however, to the Council the power to decide against reporting any special matter. The reports were not full enough to show the amount of work done by the Council. If the reports were fuller more interest would be excited among the members. The Council had to expend the money, not of wealthy men, and the members ought to have as much as possible for their money. The work done in committee was usually the most interesting, and he urged that the Council ought not to keep the most interesting parts to themselves.

THE CHEMIST AND DRUGGIST

COMMERCIAL COMPENDIUM

deals with the trade side of pharmacy

[Commenced *C. & D.*, July 5, 1924]

Rose Oil, Synthetic.—The more important products simulating the odour of the rose are diphenyl methane, diphenyl oxide, phenyl-propyl-alcohol, phenyl ethyl propionate, phenyl ether, phenyl acetate, phenyl acetic acid, and *l*-linalol *l*-citronellal, decylic acetate, normal nonyl aldehyde and citral. Thus the Jacqueminot rose odour is imitated by geraniol 42, citronellol 21, nerol 13, phenyl ethyl alcohol 22½, citronellyl acetate 1 per cent., aldehyde c. 10. The cherokee rose odour is imitated by citronellol 36, nerol 24, phenyl ethyl alcohol 18, geraniol 6, benzyl acetate 7, hydroxycitronellal 9. The white rose odour is represented by geraniol 57, citronellol 21, phenyl ethyl alcohol 22, hydroxycitronellal 4, aldehyde c. 100 (one per cent.), patchouli oil, one per cent. But it is necessary to round off the artificial essences with fixative natural perfume products. (*See* Journ. Amer. Pharm. Assoc., Oct. and Nov. 1927, *C. & D. Diary*, 1925, *C. & D.*, Jan. 1925 (pp. 13, 14.)

Rose Oil, Commerce.—The world's consumption of rose oil is not large, but the high cost of production renders the value of the trade a considerable item in the essential oil markets. The largest quantities are exported from Bulgaria and lesser amounts from France, Turkey and Anatolia. The monthly exports from Bulgaria, with the destinations, are published in the *C. & D.* each month. Some idea of the importance of the Bulgarian rose oil industry may be gathered from the fact that 5.5 per cent. of the total value of the essential oils imported by the United States during 1926 were otto of rose, and in 1927 the figure was 4.5 per cent. Between 45 and 65 per cent. of this oil came direct from Bulgaria, 25 to 35 per cent. arrived via France, and the balance came from Turkey, the United Kingdom, Yugoslavia and Albania. The production of otto in Bulgaria ranks as the fourth leading item in the commerce of the country. Shortly after the world war prices dropped so low that growers replanted their fields with other crops, but by the end of 1924 a recovery was noticeable and the acreage under cultivation has increased annually from that date. As a rule, practically all of the oil produced in Bulgaria is exported annually as the domestic consumption is almost nil and it is the general desire of the producers to have no stocks left over. The following table shows the quantity and destination of Bulgarian exports during recent years :—

Destination	1923	1924	1925	1926	1927	1928
Great Britain ...	236	68	156	198	176	177
Germany ...	146	308	138	311	205	174
United States ...	1,106	623	415	569	228	353
France	1,497	2,485	1,183	1,390	1,570	2,035
Switzerland ...	103	74	169	584	149	352
Other countries ...	92	59	108	13	78	66
Total kilos ...	3,180	3,617	2,169	3,065	2,406	3,157

Rose oil for export is usually sold c.i.f. The following are the range of spot prices per ounce for the range of grades of pure Bulgarian otto over the past ten seasons : 1919, 57s. 6d.-90s. ; 1920, 60s.-70s. ; 1921, 50s.-70s. ; 1922, 35s.-50s. ; 1923, 35s.-60s. ; 1924, 57s. 6d.-60s. ; 1925, 60s.-90s. ; 1926, 50s.-60s. ; 1927, 45s.-60s. ; 1928, 50s.-60s. The capital invested in the industry in Bulgaria is estimated at 100,603,872 leva, of which 4,770,000 represents value of lands, 36,015,000 for buildings, and 48,818,874 in machinery and equipment. The principal consumer, as can be gathered from the above table, is the French perfumery trade, which absorbs about one-third of the annual output, U.S.A., Britain and Germany coming next in that order. For many years the trade in rose oil in Bulgaria was in the hands of a few large export merchants, mostly at Kazanlik, but when large distilleries began to be established a portion of the export business fell into the hands of the latter. The small rose farmer, who has no foreign connections, is compelled either to offer his oil to the merchants or to sell his flowers to the distilleries. At the present time, which may possibly be a transition period, there are two distinct sections of the trade. The first and least important is the home trade, which is catered for by the small distillers or growers on the one hand and the large distilleries and jobbers on the other. The second section, which goes out for export trade, is carried on by export merchants as well as the larger manufacturers. At the source the prices are fixed for the otto on the basis of the solidifying point of the oil because of the practice of diluting with palmarosa oil. Assuming this basis price to be 15 leva, the price of one muscal of rose oil, solidifying at 16°, would be $15 \times 16 = 240$ leva, for oil solidifying at 18° it would be $15 \times 18 = 270$ leva, and so on. Prices vary greatly and, of course, are also governed by the prices paid for flowers to the growers. About an average of one-fourth of the total production comes from small growers who distil the otto from their own flowers. A report from Bulgaria dealing with production in 1928 indicates that marked progress is being recorded in the number of steam distilleries operating. There were in all thirty-four large factories, seven of these being devoted to rose concrete installations, eight being modern steam distilleries and nineteen using improved direct heating stills. France also produces large quantities of otto of rose, but details of the production are difficult to obtain, although import and export figures are available. The highest yield from bushes (50,000 kilos of flowers per hectare) is reached in the fourth or fifth year of cultivation and the plants maintain this yield until their tenth year, after which a marked decrease is noticeable, until at twelve to fifteen years old harvesting is not profitable and the rose trees are grubbed up. As in Bulgaria, the price of flowers has been subject to great fluctuations in the course of the post-war years. Before the war from 0.5 to 1 franc per kilo was paid, while in 1920 eight francs was realised, and in 1923 the price fell to two to three francs. The average crop of roses in the South of France is estimated at from 1,500,000 to 1,750,000 kilos. At least three-fourths of this is worked up into concrete oil, absolute oil and rose pomade, the remainder being used to make rose water and distilled rose oil. The following figures show the imports into and exports from France :—

Year	Imports		Exports	
	Kilos	Value in frs.	Kilos	Value in frs.
1914	745	1,639,000	3,096	6,811,200
1920	4,056	16,224,000	2,848	17,088,000
1921	1,554	5,404,000	2,475	14,850,000
1922	1,384	3,121,000	3,035	4,858,000
1923	1,765	5,328,000	2,353	7,796,000
1924	2,854	11,919,000	2,310	5,536,000

Production in Italy has increased steadily within recent years but is not yet large enough to be a governing factor in world markets. Persian oil is prepared only when specially ordered, and even then in very sparing quantities. The average annual output over the past ten years has been in the region of 2,500 miscals (320 ounces), and the constants vary considerably, indicating adulteration with fatty oils and refined mineral oils. Anatolian otto is highly valued by some manufacturers on account of its reputed purity. According to Turkish statistics, exports from Turkey average between 400 and 500 kilos per annum, most of which goes to France. This production has recently been increasing owing to Government interest and partial control. None of these sources are, however, sufficiently active to threaten the practical monopoly enjoyed by Bulgaria and France.

Rose Petals.—In some of the wholesale drug lists two varieties of dried rose petals are mentioned, viz., *Rosæ Gall. petala exot.* and *Rosæ Gall. petala Ang.*, of which the latter is one-third higher in price. As a rule there is so small a demand for the dark red rose petals in this country that it does not pay to cultivate them, except by the few growers who can utilise what they grow and make the confectio rosæ gallæ themselves. Florists, as a rule, grow roses of so many different kinds and of such varying tints that it does not pay to select dark blossoms for medicinal purposes, as there is a fairly ready sale for mixed petals for pot pourri. With respect

The C.&D. Commercial Compendium

to the rosæ Gall. petal. exot., although the dark red Provins rose used to be extensively grown near Provins in the fourteenth century, Blondel states that the industry there has quite died down, but the rose de Puteaux, which is cultivated near Paris for the use of pharnaciens is the *Rosa bifera* of Redouté (placed doubtfully under *Rosa damascena* by De Candolle) probably is now not only supplied from near Paris, as it is cultivated also near Lyons, in Germany, and Holland. The Continental rosæ Gall. exot. has usually flower buds cut off close to the top of the calyx tube and dried in that condition, forming little cone-like masses. The English rosæ Gall. petal. usually takes the form of loose petals freed from the calyx and crumpled in drying, but of good odour and dark red colour, and are apparently derived from hybrid roses of the *R. gallica* type. Dried rose petals are sometimes offered artificially dyed with aniline colour, but these are readily distinguished by the base of the petal being uniformly coloured red, whilst in the natural petal the base is paler.

Rose Water.—The art of distilling rose water appears to have originated in Persia at a very early period, for during the reign of Caliph Mamoun (A.D. 810 to 827) the province of Laristan was required to pay an annual tribute of 30,000 bottles of rose water to the Treasury of Baghdad. The rose water of Laristan was also exported to China, India, Yemen (Arabia), Egypt, Andalusia (Spain), and Morocco. The most important factories were at Dschur (now called Firuzabad) between Shiraz and the coast. The industry is evidently still carried on, for a few years ago bottles of Persian rose water appeared in the London drug market. Kaempfer, in his "Amœnitates," remarks that roses are produced in Persia in greater abundance and with finer perfume than those of any other country in the world; and that those of a particular district in a suburb of Shiraz, called Mescide Berdi, excel in profusion and in fragrance those of any other locality in Persia. The rose cultivated there is believed by Blondel to be the *Rosa moschata*, a tall yellowish-white rose with numerous flowers in compound corymbs with undivided sepals which as well as the stalks are downy. It extends from Southern Europe to India. In Europe the distillation of rose water appears to have commenced only near the close of the thirteenth century. It was much used in the middle ages both in cookery and on the table. In some parts of France vassals were compelled to furnish to their lords so many bushels of rose flowers to be utilised in the distillation of rose water. It has been stated recently that the inhabitants of Eastern Trans-Caucasia are cultivating a special variety of a very odoriferous semi-double rose which might well be the *Rosa moschata*, the rose water from which has been sold in Moscow at 10 r. per lb. Rose water is also distilled in India from *Rosa damascena*, where large areas of ground have been converted into rose gardens as at Patna, Ghazipur, Amritsar, and Lahore, but the rose water and otto are practically kept for home consumption and not exported. The aqua rosæ of the B.P. is stated to be "the rose water of commerce" prepared by distillation from the flowers of *Rosa damascena*, Linn., diluted immediately before use with twice its volume of distilled water, but the standard of strength of the commercial rose water is not stated and the drug lists give aqua rosæ dest., aqua rosæ Gall. trip. extra, aqua rosæ Gall. trip. super, and aqua rosæ conc., virgin (the terms used appear to correspond to those of cheaper kinds of otto). The first named is priced at 1s. 1d. lb., and the last at 19s., so that it is difficult to understand which is intended by the B.P., but as in Germany a concentrated aqua rosæ is prepared from *Rosa damascena*, that is probably intended. It is prepared of two strengths by Schimmel—"double" from two parts by weight of roses to one part by weight of water, and "Sextuple" from six parts by weight of roses to one part by weight of water. The sextuple represents the highest obtainable concentration, for if placed in ice overnight small drops of oil appear on the surface. The sextuple allows two parts of water to be added to reduce it to the ordinary strength of rose water. This sextuple rose water is apparently intended by the B.P. as "the rose water of commerce." The U.S.P. has an aqua rosæ fortior, prepared by distilling the fresh flowers of *Rosa centifolia*, Linn. with water, having a strong and pleasant odour of fresh rose blossoms free from empyreuma, mustiness or mucoid growths. The aqua rosæ is prepared by adding to one volume of the aqua rosæ fortior an equal volume of distilled water recently boiled. The odour and taste of the rose water prepared from the flowers of *R. centifolia* is not quite the same as that from the flowers of *R. damascena*. Rose water is obtained from the distillation of rose flowers (*Rosa centifolia*) in the South of France. Generally speaking, in France the rose water is the main distillation product, the rose oil being a secondary consideration. The water is not returned to the still as in Bulgaria, and is a valuable commercial commodity. It contains the soluble constituents of the essential oil, and is sold in varying strengths, but there are no definite standards. Thus "Aqua rosæ triplex" is the most usual strength sold. It is generally understood that 100 lb. of rose leaves yield 100 lb. of rose water; the first 50 lb. of the distillate is called "Aqua rosæ quadruple," and the second 50 lb. "Aqua rosæ triplex." Rose water is very valuable to the perfumer, and is used in place of ordinary water to reduce the strength of alcohol where a rose perfume is required.

Rosewood.—The name rosewood is generally applied to timbers used for furniture and cabinet making, but few of them are of interest to pharmacy. African rosewood, *Pterocarpus erinaceæ*, yields African kino; Burmese rosewood (*Pterocarpus indicus*) yields Burmese kino; Jamaica rosewood (*Amyris balsamifera*) yields the West Indian sandalwood oil. The most prized of the species used for timber is that of Rio Janeiro, usually attributed to *Dalbergia nigra*. A list of others from Brazil, Dominica, India, Moulmein, New South Wales and Tasmania may be found in the "Treasury of Botany," vol. X. But the oil of rosewood, or as it is commonly called oil of rhodium, although known for at least two centuries, has nothing to do with any of the rosewoods, and almost always bear a spurious or a more or less adulterated article, the botanical origin of which has never been thoroughly cleared up. Even in 1718, Quincey, in his "Dispensatory," says the wood from which it is drawn affords so little oil that it is extremely dear, therefore the oil is generally adulterated. At the present day Parry states that the oil is almost, if not quite, invariably an artificial admixture of several essential oils, of which otto of rose or the Turkish oil of geranium are responsible for the rose odour. Mr. E. Carpenter, of Bristol, points out that the oil is used in this country and Australia as an enticement for rats, mice, and rabbits, but it has been found that if the oil of the bois de rose, which contains linalol, is mixed with it or substituted for it, it does not attract these animals, but only those oils which contain geraniol do. It would seem, therefore, that oil of rhodium might be well replaced by palma rosa oil. The best description of lignum rhodium is that given by Lewis ("Dist. Mat. Med.," 1810, vol. II, p. 62), who states :—

Lignum rhodium is the wood or root of a tree of which we have no certain account, brought from the Canary Islands. It is in long, crooked pieces, full of knots, externally of whitish colour and internally of a deep yellow with a reddish cast The largest, smoothest, straightest, heaviest and deepest-coloured pieces should be chosen, and the thin, small, pale, light ones rejected. It has a slightly bitterish, somewhat pungent balsamic taste and a fragrant smell, especially when scraped and rubbed, resembling that of roses.

Digested in rectified spirit, it gives out pretty readily the whole of its active matter and tinges the menstrum of a reddish-yellow colour. On committing the filtered tincture to distillation, the spirit brings over little or nothing of its flavour. Distilled with water, it gives over somewhat difficultly and slowly a highly odoriferous essential oil, at first of a gold colour, by age turning reddish, amounting, if the rhodium is of a good kind, to about one ounce from fifty.

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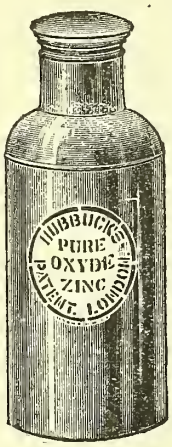
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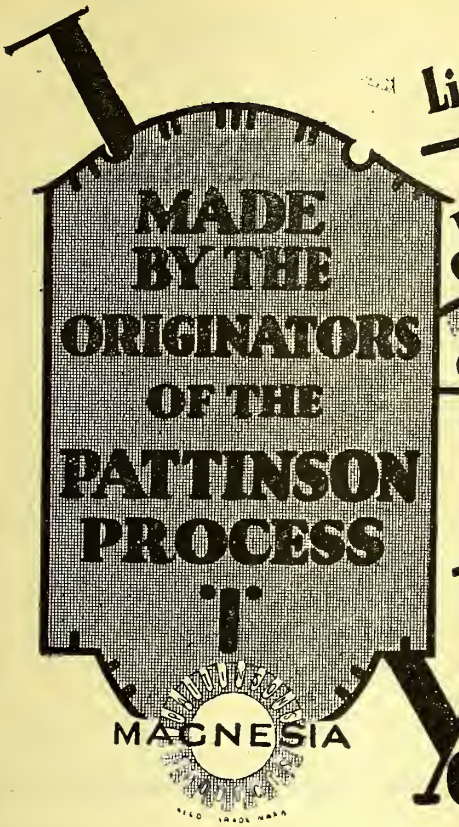
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The chemically pure glycerine supplied by us is guaranteed to comply with all the requirements of the Food and Drugs Act and the British Pharmacopœia.

PRECIPITATED CHALK. Finest and lightest, also heavy grades.
COD LIVER OIL. (Finest Lofoten.)
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DECOLORISING CARBON.
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Sugar of Milk.
"THE BEST"
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QUINIDINE
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Sugar-coated Quinine Tablets and Pills.
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THIS IS YOUR GOVERNMENT OF MYSORE *GUARANTEE*

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LTD.
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Manufacturers of COMPRESSED TABLETS

of perfect finish Guaranteed made with purest Drugs & Chemicals. Quick and complete disintegration a special feature—



Also Manufacturers of
GELATINE CAPSULES
machine made of perfect ovoid shape and completely and readily soluble, containing the purest ingredients.

CUSTOMERS OWN FORMULAS FOR TABLETS OR CAPSULES ACCURATELY PREPARED.

For lists of formulas and reasonable prices, together with samples, please apply to—

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Our Objectives

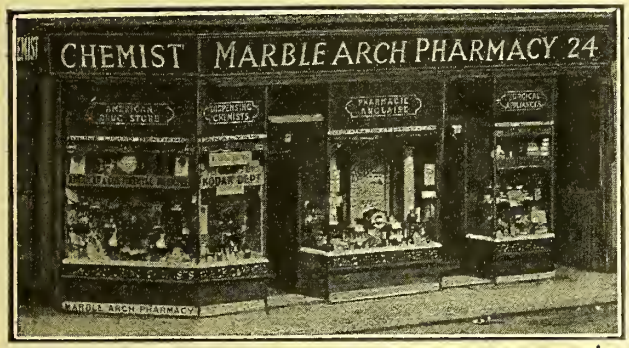
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Send us your enquiries for all lines
BULK AND PACKED
Superior Products, Artistic Pack—PRICES RIGHT
We specialise in compressing Customer's own Powders to Private Formulas . .
Strict Secrecy Guaranteed

BUCKLEY-BOWKER TABLET CO., LTD.
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Two more London Chemists testify to remarkable increasing demand for 'ASPRO'



SALES DOUBLED with Current Window Display

T. M. BLACK, *DISPENSING CHEMIST,* 160 Franciscan Road., Tooting, S.W.17

To 'ASPRO' Limited, Trading Estate, SLOUGH, Bucks.

Dear Sirs,—Just a line to let you know how pleased I am with the 'ASPRO' window show you sent me. The result since putting it in has been very marked—my sales have been more than doubled and the increase has been most marked in the 25's size.

There is no doubt in my mind that the policy of the chemist is to devote his window display to lines which are heavily advertised as yours is. It keeps a constant stream of purchasers coming into the shop which can be turned to good account for other lines stocked by us chemists.

Wishing you every success,
Yours faithfully,
THOMAS M. BLACK.

MARBLE ARCH PHARMACY
Proprietors: HYGIENIC STORES, LTD.
ENGLISH & FOREIGN CHEMISTS,
24 EDGWARE ROAD, W.2
Telephone: PADDINGTON 7699.

27th April, 1929.

Dear Sirs,—Permit me to take this opportunity of telling you how satisfied I am with 'ASPRO' sales. I recommend it extensively to all my customers, as indeed do all my four assistants and we have yet to find a dissatisfied customer, or a case in which the desired relief from pain has not been obtained.

Our close proximity to Hyde Park has brought us experience that has taught us that 'ASPRO' is very well recommended for headaches caused by sun-glare, and for the normal day-trippers headache. In fact we confidently recommend 'ASPRO' in all those cases where the use of aspirin is indicated, and particularly in those cases where ordinary aspirin is not well tolerated.

Faithfully yours,
THE MARBLE ARCH PHARMACY.

'Aspro' Bonus System for Chemists gives Extra 17% Profit

Send for special window display and buy 'ASPRO' on exclusive bonus terms for chemists. Order through your Wholesaler. The bonus works out as follows:—

BONUS ON 10's.

One Gross Order - Bonus 1 dozen packets.
Half Gross Order - Bonus ½ dozen packets.
Half gross 10's is minimum order accepted for Bonus purposes.

BONUS ON 25's.

One Gross Order - Bonus 2 dozen packets.
Half Gross Order - Bonus 1 dozen packets.
Quarter Gross Order Bonus ½ dozen packets.
Quarter gross is minimum quantity.

NO BONUS ON 5's OR 60's.

CONDITIONS.—The conditions are, that upon receipt of each bonus the chemist undertakes to show 'ASPRO' Display matter in his shop window for 14 days, and to sell at advertised prices. Acceptance of bonus is considered as acceptance of these conditions. To qualify for the bonus it is not necessary for the chemist to buy both sizes at the same time but single lots may be ordered, *viz.*, 6 doz. 10's or 3 doz. 25's.

SOLD IN 3d., 6d., 1/3 and 2/6 sizes with corresponding Wholesale prices of 2/3, 4/6, 11/6 and 21/- per dozen subject to 2½% discount 30 days.

'ASPRO' consists of the purest Acetyl Salicylic Acid that has ever been known to Medical Science and its claims are based on its superiority.

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Agents : **GOLLIN & Co. Pty. Ltd. ('ASPRO' Dept.), Slough, Bucks.**

No proprietary right is claimed in the method of manufacture or the formula. *'Phone: SLOUGH 608.*

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Of guaranteed strength and miscible with water

"Possesses a higher germicidal value than carbolic acid and probably nearly three times as high."—*The Lancet.*

SUPPLIED BEARING YOUR OWN NAME AND ADDRESS ON ORDERS OF 3 DOZEN BOTTLES.

Net Price: In 4-oz. bottles, 5/- per doz.; 8-oz. ditto, 9/- per doz.; 16-oz. ditto, 15/6 per doz.; 20-oz. ditto, 20/- per doz.; 32-oz. ditto, 27/- per doz. Special Prices for Bulk. Showcards Free.

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'Petrolagar'

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The new style bottle for 'Petrolagar' Brand Emulsion contains precisely the same quantity as the former and affords more convenience to your customers. Order stocks from your wholesaler to-day to meet increased demand.

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"Multum in Parvo."

"VAPOFORM" Disinfectant

Regd.

For disinfection of Rooms, Confined Spaces, &c. — for HOME and HOSPITAL — Has no injurious effects whatever on Furniture, Utensils, &c.

Small size, capable of disinfecting 1000 to 2000 cubic ft., 8/6 per doz.
Large size, capable of disinfecting 3000 to 6000 cubic ft., 13/- per doz.

Sole Proprietors—
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BIGGEST PROFITS!!!

IRVING'S Yeast-Vite TONIC TABLETS

OUR NATION-WIDE ADVERTISING is creating an unprecedented demand.

A well-known Manchester Chemist, when sending us a large order recently, writes as follows:—

"Might I mention at the same time that it is a pleasure to sell a line like yours which bears such a good profit and sells so freely."

LOOK *at the profit on a Special 14 day Window Show Parcel. Sent Carriage Paid together with BONUS and FREE Display Material.*

	COST.	SELLS.
6 doz. 1/3 size @ 12/-	£3 12 0 ..	£4 10 0
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BONUS 12 only 1/3	free ..	15 0
2 ,, 3/-	free ..	6 0
30 days NETT	£5 0 10 ..	£7 7 0

£5 PARCEL (P.A.T.A.)
46% PROFIT ON COST
30 days CREDIT
PROFIT £2 6 2.

LATEST SHOW MATERIAL to link up with our huge Advertising sent FREE and POST FREE. State whether required for Small, Medium or Large Display.

IMPORTANT.—Our new Factory is in full swing, but we are taxed to the utmost in meeting all demands. Order NOW to avoid losing sales.

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Telephone:—WATFORD 1475 & 806 (5 lines). Telegrams: YEAST-VITE, WATFORD, HERTS.

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should note that

Beecham and Veno Proprietaries yield fair profits, and are the best paying propositions to handle.

Beecham and Veno Proprietaries entail no loss to the Chemist, as any stocks which may become damaged in any way are promptly replaced free of charge.

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Beecham and Veno Proprietaries are worth a display in your establishments, as their steady and increasing sale will amply repay any selling co-operation extended to them.

It is therefore in the interests of all Chemists and Druggists to hold good supplies of

BEECHAM'S PILLS
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BEECHAM'S POWDERS

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SHEPPEY'S

MEL ROSE

"New Century" Cream (in tubes)

This invaluable safeguard against sunburn and dryness of the skin is prominently featured in our Summer Advertising Campaign. Launched last year with the Mel Rose name behind it, this Cream is rapidly extending the wide popularity it secured.

Of all Wholesalers:

TERMS:	Per Doz.	Per Gross
6d. Tube ..	4/- ..	48/-
10½d. Tube ..	6/3 ..	75/-

THESE LINES ARE —P.A.T.A. LINES—

Our Summer Advertising Campaign continues to feature also the famous MEL ROSE Tablet for Face and Hands, for which a ready sale is assured during summer and winter alike.

Of all Wholesalers:

TERMS:	Per Doz.	Per Gross
2d. Tablet (formerly 3d.) ..	1/4 ..	16/-
4½d. Tablet (formerly 6d.) ..	2/10½ ..	34/6

SHEPPEY'S "MEL ROSE" TABLET

Manufacturers:
ROBERTS & SHEPPEY, 2 Skipton Street, LONDON, S.E.1

Season—1929

BRØDR. AARSÆTHER Manufacturers of FINEST PURE LOFOTEN Trade Mark AA COD LIVER OIL Est. 1877 ÅLESUND, NORWAY

COD LIVER OIL

GUARANTEED GENUINE. FINEST PURE LOFOTEN.

Manufacturers:

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LARGEST MANUFACTURERS OF COD LIVER OIL IN NORWAY.

SPECIALITY—Cattle and Poultry Feeding Oils.

Stocks always held in London. In 25-gallon tin-lined barrels.

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Codes used: A B C, 4th and 5th Edit., Bentley's, and Private.

PURE ORANGE WINE

A. MILLAR & CO., LTD., DUBLIN

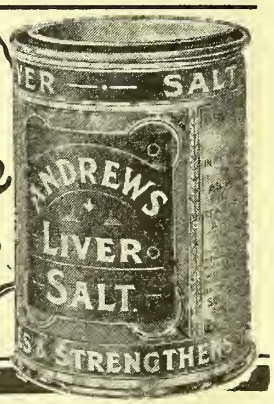
(VINUM AURANTII B.P.) Prepared in strict accordance with the Formula of the British Pharmacopœia. (Wholesale only.)
Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.

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CHOICE ENGLISH HONEY - - - ½ lb. Glass Jars, 11/- doz., 1 lb., 20/- doz.
FINEST CALIFORNIAN WHITE CLOVER ,, ,, 7/6 ,, ,, 12/6 ,,
Ditto in patent containers - - - 2 oz. 2/8, 4 oz. 4/3, 8 oz. 6/9, 16 oz. 11/- ,,
NATURAL LIQUID HONEY, Tupelo, not clarified, natural non-setting Nectar, in Glass Jars, ½ lb. 8/6, 1 lb. 14/- doz.
Also French, New Zealand and Canadian Honey.

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The Saline with the largest sale 9d. & 1/4.



"YEAST FOR VITAMIN B."

Yeast specially prepared for medicinal purposes.

GUARANTEED ABSOLUTELY PURE.

MIDGLEY & PARKINSON, LTD.,
WARREN WORKS, PUDSEY, LEEDS.



CACHETS "FINOT"

(*White or Coloured*)
With inscriptions in any desired tint; also Plain or Embossed.
"A distinction all their own."—*C. & D.*
"Perfection of Cachets."—*Lancet.*
These Cachets are especially adapted for Headache, Neuralgia and other powders.
COOPER SON & CO. LTD., 80 Gloucester Road, SOUTH KENSINGTON.
In 17 Sizes to fit the various types of Cachet Machines.

It will pay you to stock them!

When the public demand goods bearing a specified name the wide-awake retailer prepares to meet that demand and so reap the benefits which follow.

IGLODINE has become a household word, and the public, through satisfaction which comes after trial, are demanding IGLODINE PREPARATIONS. Are you the retailer who is preparing to meet the demand?

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The Safe and Pure Antiseptic

Write to-day for full particulars to:
THE IGLODINE CO., LTD. - Newcastle-on-Tyne.

THE VALUE OF

"YADIL"

is fully recognised by qualified judges, and it is certified by eminent Public Analysts and Pathologists to be
:: :: ABSOLUTELY SAFE FOR :: :: INTERNAL AND EXTERNAL USE.

It has been sold all over the world, and is being used to-day "back of beyond" as well as in the homes of our own country. Its sale is steadily increasing, old customers are retained, while new ones are being added. One or two displayed bottles will quickly establish business which will prove profitable and regular. Any assistance we can give in the provision of advertising material is yours for the asking. The "Yadil" lines cover "YADIL" ANTISEPTIC (LIQUID AND PILLS), "YADIL" OINTMENT, "YADIL" PASTILLES and "YADIL" SOAP.

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What Cod Liver Oil Does:

It stimulates normal growth which has ceased or become stunted owing to lack of sunshine or proper food.

It prevents and cures rickets in children.

It gives increased protection against epidemics and against wasting diseases, such as consumption.

It maintains the strength during illness and assists recovery.

It builds up the system after illness and restores health, vitality and strength.

There is no proved efficient substitute for Cod Liver Oil as a natural source of the essential Vitamins A and D.

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National Committee for Promoting the Consumption of Norwegian Cod Liver Oil, Post-Box 226, Bergen, Norway.



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Petroleum Jelly

White, Yellow, Amber, & Ruby Red, for all Pharmaceutical and Veterinary purposes

MEADE-KING, ROBINSON & CO., LTD.

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ALL GRAVITIES. HIGHEST VISCOSITY.

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"JASMINE" BRAND WHITE OILS

CHEMICALLY PURE. WATER WHITE. ODOURLESS.
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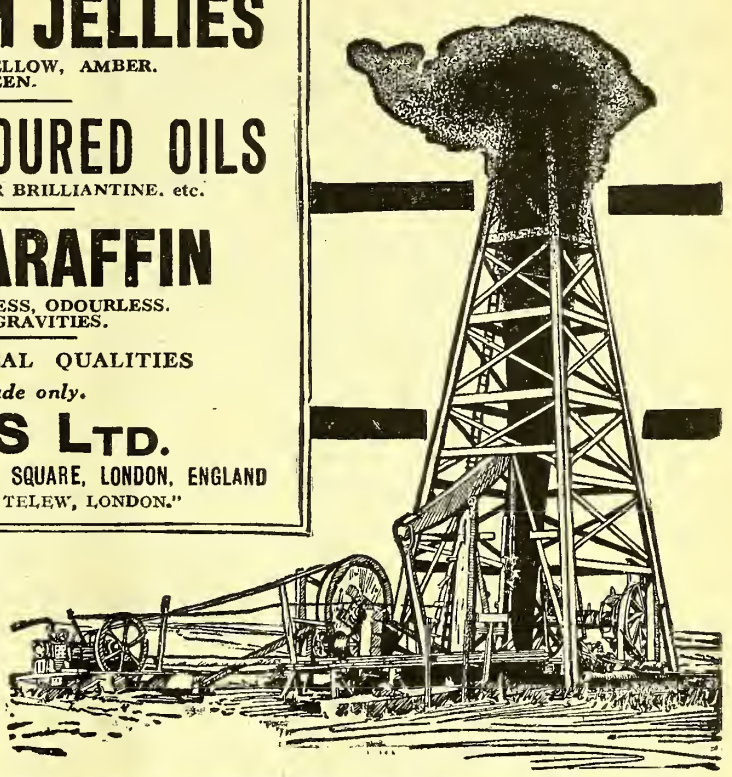
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BEE-HIVE TRADE MARK

REGISTERED FOR OUR WELL-KNOWN BRANDS OF CERESINE WAXES.

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Have you got A FAIRY DYES' WINDOW CURTAIN?

Already throughout the country retail shops are displaying these window curtains to their great advantage. Not merely does it help them to sell Fairy Dyes and so add to their profit, it also forms a definite magnet of attraction and makes the passer-by stop and look in the window.

This is as it should be as Fairy Dyes want to help all round and while incidentally selling more Fairy Dyes they want to see their customers prosper.

This is a helping hand—clasp it by sending to-day for a Fairy Dyes' window curtain.

It can be trimmed to fit your window and you will always be glad you took advantage of this offer. It comes to you free and post free, and is a gift you will really appreciate.

Fairy Dyes, LTD.

WELL ROAD, GLASGOW

London Depot: 292 UPPER STREET, ISLINGTON, N.1.

"PRESTOP"

Milk COVER & Cardboard disc REMOVER



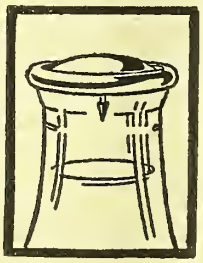
6d.

FITS ALL SIZES.

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Langenfeld, near Cologne, Germany

EXPORT TO ENGLAND SINCE 1884.

Manufacturers of :—



TUBES of all kinds, plain and decorated.

SPRINKLER TOPS of all sizes and styles.



IMPORTANT: When asking for quotations send samples already used and state quantities required. Goods will arrive in 3–4 days with direct steamer from Cologne.

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Ask for Quotations and Samples.

OUR SPECIALITIES:

PARAFFINUM LIQUIDUM B.P.

TECHNICAL WHITE & HALF-WHITE OILS

COLOURED BRILLANTINE OILS

27 MINCING LANE, E.C.3 *Royal 2944.*

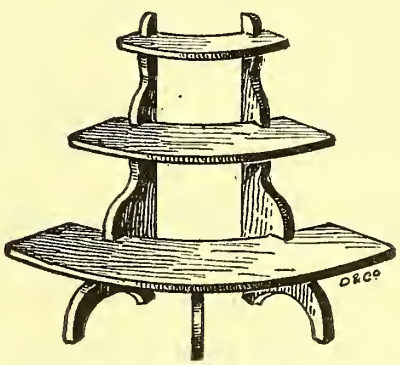
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All Specific Gravities Guaranteed to remain bright at 0°C
White & Half White Oils.
B.P. White & Yellow Petroleum Jellies.
QUOTATIONS & SAMPLES
will be sent on application—

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Telephone: Sloane 3461 (7 lines).
Telegrams: "Dicotto, Sowest, London."
and at
GLASGOW LIVERPOOL
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PETROLEUM JELLY
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THE PERFECTION OF PETROLEUM JELLY
MANUFACTURED SOLELY BY
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WHITE OILS B.P. & Technical Qualities.
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OLEUM DEELINÆ (DEE OIL)
THE UNFAILING CURE FOR ECZEMA

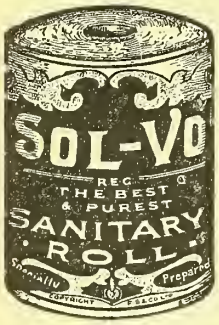
A Useful Display Stand for the Chemist—



No. CDF 1974.
Solid Oak Plywood **Display Stand.** 3-tier. 19¾ ins. high, 20½ ins. wide, back to front 20 ins. **10/6 Each**
This Stand is supplied flat and boxed. To erect same fit all the shelves into one side section first and then drop the other side section on from the back.
Send for our full list No. C.D. 1115.

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City Showrooms - - 65/66 FORE STREET, E.C.

SOL-VO SANITARY ROLLS & PACKETS.



SOL-VO
REG^{D}
THE BEST & PUREST
SANITARY PAPER



	per doz.			per doz.
Three dozen Rolls	... 7/- net.		Three dozen Packets	... 10/- net.
Half gross ,,	... 6/6 ,,		Half gross ,,	... 9/6 ,,
One gross ,,	... 6/- ,,		One gross ,,	... 9/- ,,
Five gross ,,	... 5/3 ,,		Five gross ,,	... 8/3 ,,

CARRIAGE PAID. CASES FREE.

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ESTAB. 1850

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CHEMISTS' SUNDRIES
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TEMPORARY PREMISES
during the erection of our
OLD STREET premises

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Always keep a display of
NORVIC
BLUE CARTON
CRÊPE BANDAGES

	2"	2½"	3"	3½"	4"
Cost	12/-	15/3	18/3	21/3	24/3
Sell	1/6	1/11	2/3	2,8	3/-



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Stocked by all the leading wholesalers.

WILSON
Surgical Industrial & Household GLOVES
"The temper of Finest Steel"

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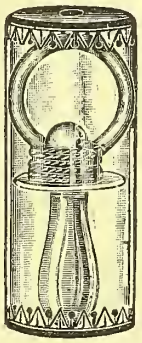
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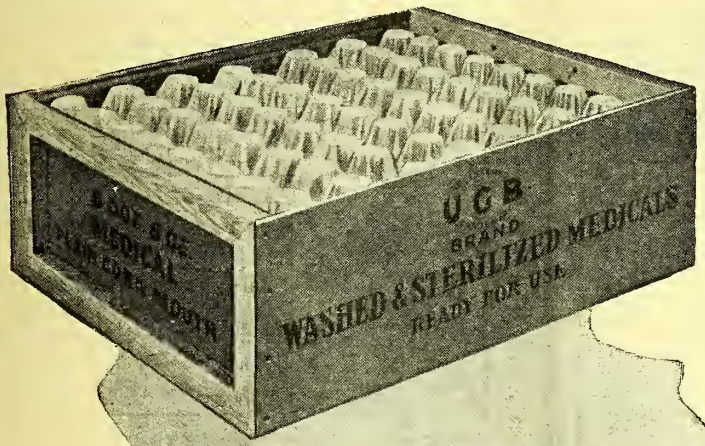
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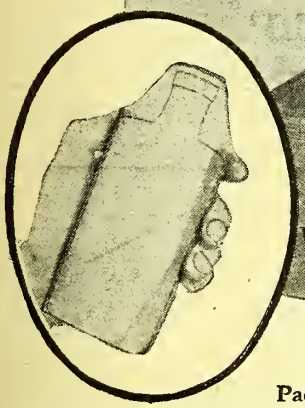
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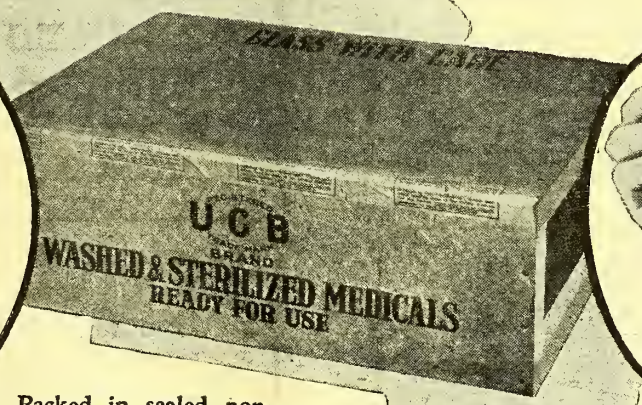


Photograph of actual package of Cork-mouth bottles with cover removed.

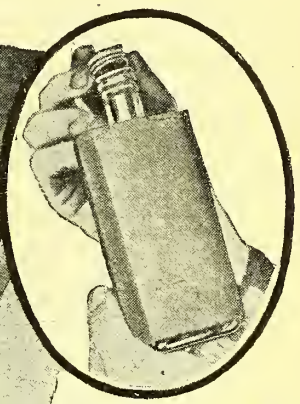
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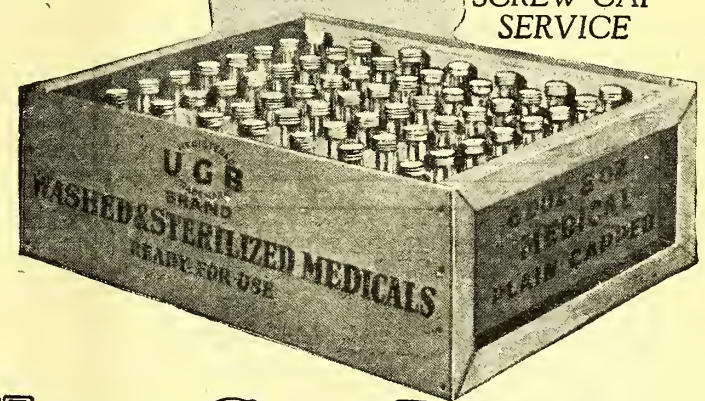


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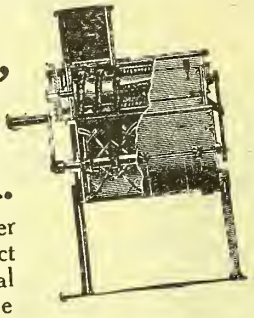
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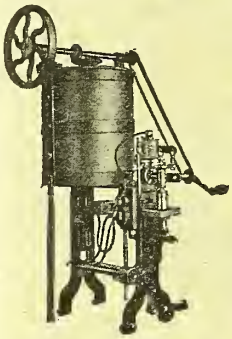
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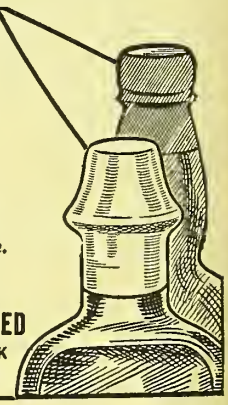
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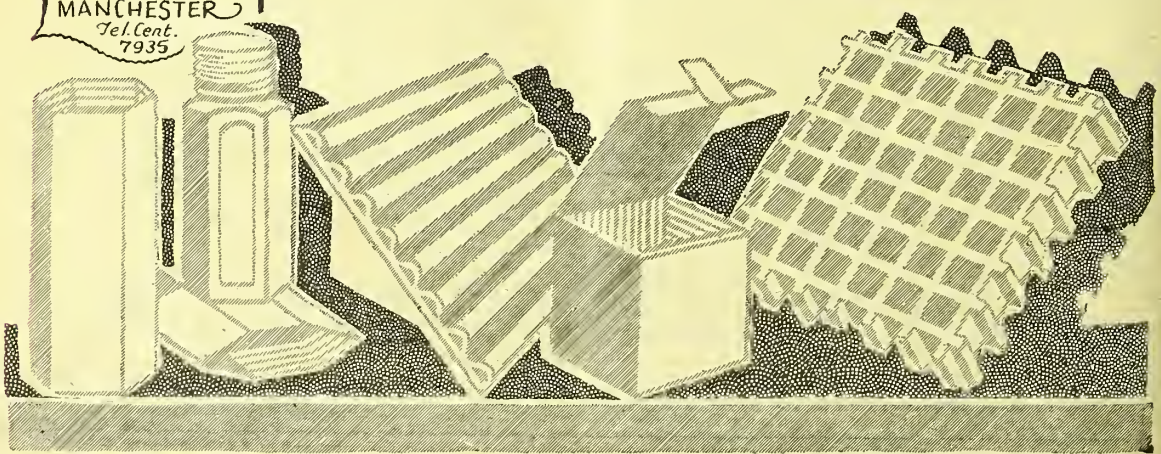
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42 CANNON ST. LONDON E.C.4

AUGUST 10, 1929

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The clerical work in connection with the posting of spare copies of the Coloured Supplement week by week has increased to such an extent that we have been compelled to reorganise our system of distribution. Our readers will please note, therefore, that in future, instructions can be accepted for not more than six successive issues of the Supplement at a time, and that in every case the name and full postal address should be written on

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5.—LONDON, E.—Old-established Retail and Dispensing Business; returns £3,600 p.a.; good living accommodation; freehold for sale, or would consider granting a lease; strongly recommended. Further particulars on application. (188)

6.—LONDON, N.—Established Chemist's Business; premises, which include convenient living accommodation, held on lease, 15 years to run; rental £50 p.a.; stock approx. £285; price asked £550, all at. Further particulars on application. (180)

7.—LONDON, N.W.—Retail Dispensing Business on 13 years' lease at £52 per annum inclusive; returns £1,000 p.a.; excellent opportunity for young qualified man. Further particulars on application. (183)

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9.—SOMERSET.—Drug and Photographic Business; premises, which consist of lock-up shop with room at rear, held on lease with 8 years to run at a rental of £88 p.a. inclusive; good scope for live man; price asked £400. (178)

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13.—LONDON, N.W.—On lease, 8 years to run, at rental of £78 p.a. inclusive; returns £10 per week; excellent opportunity for qualified man; good opening for N.H.I. Further particulars on application. (195)

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2.—LONDON, S.W.—Good middle-class, with Kodak Agency, returning nearly £1,700; main road position; scope for increase; handsome modern pharmacy; good stock; price £1,000.

3.—HOME COUNTY (30 Miles Out).—Unopposed light Country Retail, pleasantly situated and easily worked; returns, £2,100; net profit, £620; good all-round stock; nice house; bathroom, electric light, etc., and garden; price, including freehold, £2,550; owner retiring.

4.—KENT.—With Optical Business adjoining; returns £2,700 (Optics £500); net profit nearly £600; very long lease; low rent; would sell separately; price to include Optical, goodwill, but not fittings, £1,200.

5.—ESSEX.—Busy main road in densely-populated district; good house; well fitted and stocked; returns £1,500; net profit about £400; best offer over £1,000.

6.—ESSEX COAST.—First-class Cash Retail and Dispensing Business, in excellent position; turnover about £5,500; good profits; audited figures; handsome pharmacy, fully stocked; 21 years' lease granted; price £4,750, or valuation terms arranged.

7.—WEST MIDLANDS.—Unopposed Country Business, in centre of large agricultural district; returns nearly £1,300, in unqualified hands; qualified proprietor could soon double returns; modern shop, with good house over; low rent; on lease; price £1,100; worth attention.

8.—THAMES VALLEY.—Good-class Business, in very best position, growing district; returns £1,900; modern pharmacy with flat over; good stock; price £1,500.

9.—SOUTH COAST.—Good-class Retail, Dispensing and Photographic Business; returns over £1,900, increasing; net profit £470; modern lock-up shop, well fitted and stocked; price £1,075.

10.—HACKNEY (Near).—Old-established Light Retail, with large Panel; fine opening for Photo; returns £2,500; net profit over £750; own property; long lease granted; house attached; price £1,650, or offer.

BUSINESSES WANTED.

BERDOE & FISH are in immediate want of sound Businesses up to £4,000, and cordially invite correspondence from intending vendors. We have a large number of cash buyers waiting, and are able to negotiate sales quickly and without publicity. Transfer Offices, 41 Argyle Square, King's Cross, W.C.1. Estab. 1870. Telephone: Terminus 3574.

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Will be pleased to pay a personal visit to Pharmacists in any part of England, Wales and Scotland to discuss matters in connection with Stock, Income Tax, Sale or Purchase, Partnerships, or Company Formation.

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LEEDS. Drug Stores with house. Doing £1,000, splendid opening for N.H.I. and photohouse. Price £650. Must sell owing to illness. NEAR LEEDS. Two village pharmacies, doing £1,400 and £1,000, at £750 and £550. No opposition. SHEFFIELD (near). Well-fitted pharmacy with house. 600 scrips monthly, returns £1,000. Scope for increase. Must sell, price £650 or offer.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

BRIGHTON.—Pharmacy for Sale, busy street; modern double-fronted shop; well fitted; low price for quick sale. Apply 11 Sydney Street, Brighton.

COUNTY DURHAM (central position in industrial town).—Retail and Dispensing Business, with N.H.I., Wine Licence, Kodak Agency, good D. & P., and growing Surgical connection; average turnover over past 6 years, £4,000; rent £150; price £2,250. Apply 52/8, Office of this Paper.

ESSEX.—Suburban; main road; densely populated; Business with exceptional opportunity for increase; smartly fitted and well stocked; double-fronted windows; Kodak Agency; N.H.I.; unique offer; returns £1,500, increasing; net profit £400, about; splendid living accommodation; price £1,050. 53/6, Office of this Paper.

KENT.—Middle-class Business; Optical connection; Kodak Agency; returns over £2,500; lease 21 years; rent £72; main road; audited accounts; fully stocked; ill-health cause sale; established 10 years. Particulars, 53/37, Office of this Paper.

LINCOLNSHIRE.—Good-class Light Retail; Kodak; little N.H.I.; very well stocked, double-fronted shop; prosperous district; opposition 2 miles; returns £20 per week; excellent house, every convenience, could be leased, or shop lock-up; fair deal; every investigation; expenses not heavy; suit qualified or unqualified; must sell for sound reasons. 52/39, Office of this Paper.

LONDON, W.—Unique opportunity for lady pharmacist or single man; newly opened shop in best residential suburb, with steadily increasing trade; returns already approaching £25 per week, with very large scope for increase; for quick sale £550 or best offer. Apply 54/26, Office of this Paper.

MANCHESTER AND NEAR.—At the moment I can offer choice of several sound Chemists' Businesses and Drug Stores, lock-up and otherwise, returning £1,000 per annum upwards; low rent, lease, etc.; price £400/£1,200, or accept valuation for quick sale. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Failsworth 113.)

NEAR LEEDS (Retiring).—Genuine old-established Chemist business for Disposal in good residential suburb; excellent position in main street; healthy district; no opposition; three doctors within 100 yards of shop; good N.H.I., Kodak and Rexall; double-fronted, stone-built shop and house, £1,000; business, £800; cheap. Apply 55/24, Office of this Paper.

NORTHANTS.—Splendid opportunity to secure a really sound and well-established Chemist's Business, together with Branch (might sell separately); the two return £4,000 yearly; easily worked; good living accommodation; price £2,750, all at; offers considered. Another first hand offer (Leicester), returning £1,800 yearly; excellent position and scope for increase; accept valuation; approximately £1,500 required. "No triflers, please." Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Failsworth 113.)

NORTH WALES COAST (popular health resort).—For Sale, high-class Dispensing, Photographic and Family Business. Full particulars (in confidence) of Speechleys, Accountants and Auditors, Colwyn Bay.

S.E.—Small, nicely fitted, adequately stocked, working-class Business; good Panel; Counter; largely Drug sales; less profit £9 to £11 per week now; satisfactory lease; shop (and house if required); purchase price, £550 or near offer, as early sale is desired; suit active pharmacist who wants a secure income. To view, etc., 54/39, Office of this Paper.

SALOP.—Old-established, good-class Dispensing and Family Business; returns past 3 years average £3,370 yearly; well fitted and stocked; exceptional offer at £1,800 for business and a further £3,500 (about) for valuable property; a splendid investment. Another excellent proposition (Southampton), lock-up, returning £1,500 yearly, increasing; well fitted and stocked; lease, etc.; good house near if required; price £950, about. "No triflers, please." Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Failsworth 113.)

SCOTLAND, EAST (County Town).—Chemist's Business and Property; General Retail and Dispensing, with N.H.I., Kodak Agency; double-fronted shop, well fitted and stocked; scope for increase; living accommodation; vacant possession; nice garden. Further particulars, 54/36, Office of this Paper.

SOUTH COAST.—Opportunity for Chemist with small capital to acquire neglected Business in growing suburb of one of the most popular seaside towns; takings at present small, but opportunity big. 55/2, Office of this Paper.

WATFORD.—The Business carried on by the late Mr. Richard Bennion, Chemist, 76 St. Albans Road, Watford, Herts, is for Sale, with shop and dwelling-house and premises. For further particulars apply Owen Bennion, Seighford, Stafford.

FOR immediate sale, good Family Business within 20 miles of London; modern premises with house; returns £2,000; £1,500 required. Fullest particulars on receipt of bankers' references to 53/31, Office of this Paper.

£250, or near offer, and part can remain; Drug and Photographic Stores in densely populated neighbourhood; established 12 months; well fitted and fairly stocked; large shop and dispensing room, good cellarage; big scope for N.H.I.; no near opposition; grand chance for M.P.S.. 55/17, Office of this Paper.

£275 ALL AT.—Drug Stores; lock-up; busy spot, with no immediate opposition; good scope for N.H.I.; good Prescribing and D. & P.; takings average £12-£14 weekly; easily doubled under proper management. "Statim," 54/8, Office of this Paper.

£4,000 or near offer secures old-established Business and Property in West Midlands market town; no company opposition; fullest investigation; capable of considerable increase, or suit purchaser needing light work and an assured income; bankers' references, please; strict confidence. 53/14, Office of this Paper.

BUSINESSES WANTED.

MANCHESTER DISTRICT.—Pharmacist requires sound Business, with or without Optical connection; turnover from £2,000 to £3,000; living accommodation immaterial. Please give full particulars (in strict confidence) to 54/4, Office of this Paper.

ADVERTISER is prepared to purchase outright now and for cost a genuine Business in London or near; small business as nucleus if sound and with immediate prospects of increase would also be considered. Please give general particulars in reply; details later at interview; bankers' references supplied and strictest confidence observed. "Statim," 55/8, Office of this Paper.

DRUG Store or Mixed Country Business suitable for unqualified, country district, with living accommodation. Full particulars, Fennell, c/o Mrs. Worley, Church Lane, Wollaston, Wellingborough.

PATENT FOR DISPOSAL.

PATENT Rights for Sale outright; Special Service Syringe for women, described by physicians and chemists as wonderful. Write, first instance, "F. W. D.," 4 Barrington Villas, Shooters Hill, S.E.18.

AGENCIES.

WELL-KNOWN Manufacturers desire to come to an arrangement with Wholesale or Retail Chemists in various large industrial towns whereby the local firm would act as a depot for the Manufacturers' products, which are required by the majority of large industries and are for the most part not of a bulky nature. First-class firms who are in a position to consider such an arrangement are invited to communicate with 154/468, Office of this Paper.

PREMISES FOR SALE.

FOR Sale, House and Shop, Halifax, Yorkshire; contains large shop living room, 2 bedrooms, 2 attics, bath; electric light; all modern ranges; vacant possession; splendid position for Chemist; no opposition; price £750. For further particulars apply Holden, Accountant, Crown Street, Halifax.

PREMISES WANTED.

PREMISES required for Chemists; might entertain purchase business. Particulars to Coparts, Ltd., 12 North End Road, Golders Green, N.W.11. Speedwell 2103. Usual commission required.

PREMISES TO LET.

BATTERSEA.—Small lock-up Shop to Let, suitable for Chemist; rent £52 per annum. Apply Quintana & Co., 86 Eccleston Square, S.W.1. Vic. 5008-9.

SHOPS with Flat over to Let on lease in excellent position at Bromley; suit Chemist. Apply Baxter, Payne & Lepper, opposite G.P.O., Bromley, Kent.

TO Let or for Sale, Benfleet, Essex, new Shop in block of 12; 10 occupied; splendid opening for Chemist and Optician; rent £2 exclusive, or £950 freehold. Apply Raffin, South Benfleet, Essex.

SITUATIONS OPEN.

RETAIL [HOME].

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

The Advertiser may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

AYLESBURY.—Unqualified Assistant (male) wanted for two weeks from September 2; Dispensing and Light Counter. T. M. Ashford, 16 Market Square, Aylesbury.

BENFLEET, ESSEX.—Qualified Manager required, age about 30-35, for Family business; Light Retail and Dispensing; comfortable and progressive permanency. Kindly give all details as to salary required, previous experience, when at liberty, etc. 154/458, Office of this Paper.

BOURNEMOUTH (near).—Junior Assistant required (male), good appearance and address, accustomed to good-class Dispensing and Light Retail. Apply, stating age, height, salary, etc., to J. A. Haynes & Sons, The Mentone Pharmacy, Parkstone, Dorset.

BRADFORD.—Qualified Chemist required as Locum for week; may be longer; give open dates, etc., salary required. 53/8, Office of this Paper.

BRIGHTON.—A vacancy occurs for a smart qualified Assistant for a business in main part of town; applicants must have had good experience and be really first-class Window-dressers. State all particulars as to age, salary required, previous experience, and when disengaged. 154/457, Office of this Paper.

BRIGHTON.—Lady Assistant; Counter and Dispensing; outdoors. Please state full particulars, age, height, salary required, experience, when disengaged; enclose copy references and photo. E. R. Jones, 12 Matlock Road, Brighton.

BRIGHTON.—Gentlemanly, qualified, experienced Assistant, Senior, age 26 to 45; Photography; Optical Degree an advantage, not essential; full details first letter, please, salary, married or single, age, etc.; comfortable, permanent berth to right man; wanted immediately. Write Lane, Chemist, 100 Western Road, Hove.

BRIGHTON.—At once, qualified Assistant, experienced, and used to high-class Pharmacy essential. Apply, with full particulars, to Hart & Co., 57 and 58 East Street, Brighton.

CORNWALL. — Wanted immediately, capable Gentleman Assistant, age about 25. All particulars first letter, salary, etc., and photo, 55/1, Office of this Paper.

LONDON, W.8.—Smart Junior Assistant (male) required immediately until the end of September. Send references and experience and salary required to Inman, c/o Harrington, 15 Kensington High Street, W.8.

LONDON, S.E.—Qualified Assistant reqnired immediately for business in an industrial area; applicants must be quick and accurate Dispensers. State age, salary required, and when disengaged. 154/459, Office of this Paper.

LONDON, S.W.—Qualified Manager required for a small Family business (no house attached), which would suit a keen young man who is anxious to make progress. Give full particulars, stating age, salary required, and when at liberty. 154/456, Office of this Paper.

LONDON, W.—Wanted, a qualified Dispenser for a first-class Dispensing business; the position requires a man who is keen to get on and of smart appearance; preference will be given to one who has had previous experience of a similar nature. All details, please, of age, salary, when at liberty, etc. 154/462, Office of this Paper.

PHOTOGRAPHS, TESTIMONIALS, &c.

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS. As can be readily understood, when an advertiser receives from 60 to 100 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

LONDON, E.—Required, a qnalified Manager, accustomed to large N.H.I. business; this is an industrial business and is a good opening for the right man. Will applicants please state all particulars, i.e., age, salary, previous experience, when at liberty, etc.? 154/463, Office of this Paper.

LONDON, E.—Required, a qualified Manager, accustomed to large N.H.I. business; industrial; a good opening for the right man. In first letter give all particulars, age, salary, previous experience, when at liberty, or personally, Mabyn & Co., Ltd., 1 King David Lane, London, E.1.

LONDON, S.E.—Experienced Lady wanted for Retail; qualified; immediate or near future; hours 10.30 a.m. to 8 p.m. Write age, references, etc., to 54/35, Office of this Paper.

MACCLESFIELD.—Young qualified Assistant; quick and accurate Dispenser, good Counterman and Window-dresser, also assist in management of village branch business; as soon as possible. Brian, Chemist, Macclesfield.

MANCHESTER DISTRICT.—Unqualified Assistant required (late September); must be capable Counterman, Dispenser and Window-dresser, with knowledge of Photography. Please state age, experience, salary, etc. 54/32, Office of this Paper.

MANCHESTER DISTRICT.—Locum wanted for middle-class Business for a fortnight, commencing August 19. Please state terms, etc. 54/11, Office of this Paper.

MIDDLESEX.—Qualified Manager required to take charge of a business which is being opened in a busy area; this is an opportunity not to be missed for a keen and reliable man; the business has no house attached. Please send all details with first letter. 154/455, Office of this Paper.

SOUTH KENSINGTON.—Qualified Assistant wanted from September 16; age about 30; must have undeniable references, good personality, and high-class London experience; salary £5 5s. a week. Send full particulars and photo, if possible. 52/4, Office of this Paper.

SOUTH WALES.—Capable, qualified Manager required for middle-class Family business in industrial town; there is a Seed business attached to the shop; applicants must have a good personality and be able to increase turnover. Give all particulars. 154/461, Office of this Paper.

A GOOD Manager required for a very promising business in Buckinghamshire; this is a nice family business, and although the shop is small it offers unlimited scope for a young man with energy and enthusiasm; the successful applicant will have an excellent opportunity to make a good position for himself. All details, please, 154/460, Office of this Paper.

BRANCH Manager for Lancashire industrial town. Full particulars in first letter. Letters unanswered 5 days respectfully declined. "Radix," 154/453, Office of this Paper.

CHEMIST wanted; London experienced; reliable Dispenser and good at counter. Please send full particulars, first letter, experience, references, age, salary required, etc., photo if possible, to be returned. Write 54/14, Office of this Paper.

ELDERLY qualified gentleman to supervise; easy hours; no Counter work or Dispensing. Immediate reply required to 191 Rustlings Road, Sheffield.

EXPERIENCED, unqualified Assistant required; permanency. State fullest particulars first letter. T. C. Cornwell, Chemist, Hanley.

JUNIOR Assistant for Counter and Dispensing; outdoors; lady or gentleman. State experience, salary, age, when at liberty, and photo if possible. H. Laing Spink, 185 Marlowes, Hemel Hempstead, Herts.

JUNIOR Assistant, unqualified, wanted for September 2; Dispensing, Counter and Windows; knowledge of Photography essential. Full particulars, with photo if possible, to Speechly & Milbanks, Chemists, Bishop's Stortford.

JUNIOR Assistant for industrial district in London, E.; smart Counterman and Dispenser essential. Give details of age, experience, when disengaged, to 154/454, Office of this Paper.

JUNIOR (unqualified), of smart appearance, for West-End Pharmacy; good Dispensing and Counter experience essential. Apply P.C.B. 54/9, Office of this Paper.

LOCUM required, qualified, male or female, August 26 to September 14 inclusive. Reply, giving usual particulars, to Hurst, Chemist, 105 Woodhouse Street, Leeds.

LOCUM (male) for one week, August 19 to 24. Apply, with reference, to Hay Marshall, Chemist, 91 West Green Road, Tottenham, N.15, or 'phone Tottenham 1927.

MANAGER, qualified, young, energetic, preferably with Optics, for Branch, with good living accommodation; country mining district in Derbyshire; permanent; splendid opportunity for right man, who will be given a share in the business and profits. Send full particulars to 53/33, Office of this Paper.

QUALIFIED Chemist to manage small shop in Leeds. State age, wages, and experience. 154/452, Office of this Paper. Position filled if not answered in three days.

QUALIFIED lady to work branch; sole charge; permanency; also Junior; unqualified; smart, good all-round experience; outdoors. State salary, age, experience, etc. Dannatt, Chemist, Orpington.

QUALIFIED lady Assistant required for Nottingham; must have Photographic knowledge; good Counter-hand; outdoors. Full particulars of experience, salary required in first letter to Hudson, Chemist, Skegness.

QUALIFIED Manager for new Branch in London suburb; young, energetic and preferably married; good living accommodation; excellent prospects for keen man. 154/466, Office of this Paper.

QUALIFIED Assistant as Senior in old-established West-End business. Full particulars, stating salary required, experience, etc., to 53/34, Office of this Paper.

QUALIFIED Chemist wanted at once to manage small Branch (30 miles from London). State age, experience and salary required. Apply 55/23, Office of this Paper.

QUALIFIED Lady or Gentleman wanted immediately; good Salesman and energetic. State salary. 54/22, Office of this Paper.

SMART Qualified Assistant, accustomed to good-class West-End business, for Dispensing and Counter; one with knowledge of Photography preferred; salary £5. Write, stating age, height and experience, 54/19, Office of this Paper.

TEMPORARY Clerks (male), with experience of Patent Medicines and Chemists' stock generally, required during September and October to assist in pricing stock sheets. Apply "," c/o 154/464, Office of this Paper.

UNQUALIFIED Assistant; good all-round experience and Window-dresser. Apply, by letter, giving full particulars, D. Murphy, The Hygienic Stores, Chemists, 143 Charing Cross Road, W.C.2.

WANTED, a qualified Chemist in a new Dispensing Chemist's shop. Write, giving full details of previous experience, qualifications, salary, etc. Required to live on the premises an unfurnished flat provided over the shop, rent free. Apply Managing Director, The Millbrook Pharmacy, Ltd., 20 Kenilworth Road, Southampton.

WANTED, qualified Chemist's Assistant (male or female); must be a thoroughly reliable Dispenser and capable of making first-class displays. Apply by letter, stating age, qualifications and wages required, not later than Monday, August 19, enclosing two references. Applications to be addressed to "C. S.," "Arcadia," Stamford Street, Ashton-under-Lyne, endorsed "Chemist's Assistant."

WHOLESALE.

2s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

AGENCY concern having secured Continental Agencies for Rubber Articles suitable for Chemists' trade, require the services of an ambitious and comparatively young man of proved ability, capable of placing such articles on the British market. Applicant must not only be a good salesman with a live connection amongst retail chemists, but must have some knowledge of rubber goods and be capable of taking charge of the department. Initial salary will not be large, but will be progressive in proportion to the applicant's ability to produce sales. An excellent opportunity for a man with faith in his ability, willing to start in a modest way with a prospect of sharing equally in whatever success is achieved. Write, with full particulars of age, experience, and minimum salary required, to B. 51/37, Office of this Paper.

CHEMICAL Works Foreman experienced in organic processes. Apply Dept. J. H. E. E., Evans Sons Lescher & Webb, Ltd., 56 Hanover Street, Liverpool.

J. C. ENO, LTD., 160 Piccadilly, London, W.1, have a vacancy for a Salesman in West and North-West London; applications invited from men who can sell Eno's "Fruit Salt," Thermogene, Keating's Preparations, and Williams' Shaving Preparations; salesmen, not order collectors, wanted; salary and expenses; no commission. Replies should state age and give full particulars of experience and references.

OLD-ESTABLISHED London House, reorganising their representation, have room for additional Salesman; applicants must have previously handled Drug and non-proprietary specialities and Toilets; progressive and permanent position for first-class man. Applications, which will be treated in strict confidence, should give age, experience and territory on which connection is established. 154/465, Office of this Paper.

REPRESENTATIVES, with connection among Stores, Chemists and Hairdressers, to carry quick-selling Soap Novelties of Favolys, Paris, as additional line on commission basis. Reply (in confidence), giving full particulars, to Marie Jose, 1 Goldsmith House, 137 Regent Street, W.

REPRESENTATIVES, with connection among Chemists and Hairdressers, for Toilet and well-advertised Proprietary Articles; liberal terms. Full particulars first time, 55/12, Office of this Paper.

TABLET Maker required to take charge of small plant in Yorkshire; knowledge of Pill Making and Coating an advantage, but not essential. Also Improver with experience. State full particulars and wages required. "W. L.," 53/19, Office of this Paper.

WELL-KNOWN Manufacturing House, with old-established connection, require the services of a Representative, preferably young, for North Midlands. Applicants should give full particulars of their past experience, age, and state whether they have any connection on the above ground. 54/16, Office of this Paper.

WEST of England Representative required to call on Chemists with Sundries, Toilet Preparations and Medicinal Capsules, etc.; must have established connection and own car; other non-competing firm not objected to. Apply 154/451, Office of this Paper.

SITUATIONS WANTED.

RETAIL [HOME].

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

A.A.—QUALIFIED, age 28, 12 years' London, Continental and American experience, desires position with good-class firm; London only; smart business man; good appearance; fluent French. 54/25, Office of this Paper.

A QUALIFIED Chemist; 37; married; manager; sound experience all branches; good references; London area preferred; disengaged. "H. R. H.," 39 Monks Road, Lincoln.

ADMINISTRATIVE post sought by keen, active, well-educated qualified Chemist, with excellent Retail and Wholesale experience, as Assistant to Sales Manager of well-known firm; prospects essential. 54/28, Office of this Paper.

ADVERTISER, 32, tall, unqualified, keen, excellent Salesman, good personality, seeks post with prospects; first-class testimonials; disengaged fortnight. 53/40, Office of this Paper.

AN unqualified lady Assistant, 21, Scot, desires position in London, commencing October 1. 52/38, Office of this Paper.

AS Locum or permanent; disengaged beginning September; qualified; sound experience; highest references; Welsh speaking. 154/467, Office of this Paper.

ASSISTANT, tall, 24 (Referred Pharmaceutical Chemistry), with London and seaside experience in shops doing big Dispensing business, and fast Counter trade in high-class Toilets, Photography, etc., desires situation, Locum or permanency; town or seaside; excellent references; now free. "W.," 285 Hither Green, Lewisham, S.E.13.

ASSISTANT, unqualified, 26 (Part I), 10 years' all-round experience, desires post near a College of Pharmacy; part-time or otherwise. C. Raddats, 6 Grove Avenue, Tunbridge Wells.

ASSISTANT, 22 (Part I), disengaged, requires post until October 5: seaside and London experience; good references; South-West London preferred. "A. E. C.," 440 London Road, South Lowestoft.

ASSISTANT, 14 years' experience, married, at present manuaging, unqualified, good profit maker, creator own packs, desires progressive berth. Write now, Hill, 82 Station Road, New Southgate, London, N.11.

ASSISTANT or Locum; Counter, Dispensing, Photography; energetic; active; unqualified; disengaged; good references. "K.," 62 Blenheim Road, East Ham, E.6.

ASSISTANT (Part I); good Dispenser and Salesman; 16 years' experience; Brighton district preferred. Russell, 59 Barnett Road, Brighton.

ASSISTANT, 22 (referred Pharmacy), desires situation, with Dispensing Practice. D. H. Fearnside, Swindon House, Bank Street, Morley, Leeds.

ASSISTANT, unqualified, disengaged, 15 years' good all-round experience, desires permanency. Williams, 45 Holly Road, Chiswick, W.4.

ASSISTANT; unqualified; Locum or permanent; disengaged September 2; can manage. "Radix," 72 Tremadoc Road, Clapham, S.W.4.

ASSISTANT; unqualified; 45; active; experienced; N.H.I., etc.; London or country; disengaged. Bailey, 23 Kerrison Road Ealing, W.5.

ASSISTANT, 22, good Dispensing and Photographic experience, requires situation. E. Harrodine, 21 Purbeck Road, Bournemouth West.

ASSISTANT, 22 (referred Pharmacy), desires temporary situation; Counter, Dispensing and Photographic experience; good references: free September 7. S. Mundon, 4 Clive Road, Portsmouth, Hants.

ASSISTANT (Part I), a Scot, desires post; courteous Salesman, neat Dispenser. Apply 56/7, Office of this Paper.

ASSISTANT, 27, desires permanency in Liverpool area; thoroughly experienced in Dispensing, Counter, Photographics, etc.; excellent references. 53/35, Office of this Paper.

CHEMIST, middle-aged, widower, small war annuity, requires conscientious post, Wholesale or Retail; full or part time. Barker, 59 Louis Street, Leeds.

CHEMIST, capable, energetic, age 30, requires post, North-East Coast; slight Optics; expert all-round man; small salary; view to Partnership desired, but not necessary. 55/14, Office of this Paper.

COMPETENT man requires evening duty; six years' West-End experience. "J. O.," 10 Victoria Parade, Hayes, Middlesex.

DISPENSER (lady) desires post, either Locum or permanency; thoroughly experienced; highest references. 54/7, Office of this Paper.

DISPENSER-BOOK-KEEPER; disengaged; highest references. Address "J. R.," 72 Cherry Tree Lane, Rainham, Essex.

EXPERIENCED, qualified Chemist, studying Optics, desires part-time post in high-class business, London; free September or later. 54/6, Office of this Paper.

FULLY qualified lady requires Dispensing post in London; West-End preferred. Peters, 24 Parkhill Road, N.W.3.

IMPROVER or Junior Assistant (lady) requires post; good references; country district in Sussex or South of England preferred; free now. Apply Slinn, Old House Farm, Thakeham, Pulborough, Sussex.

IMPROVER, 19, disengaged, desires situation in Lancashire or Yorkshire; knowledge of N.H.I. Dispensing, Photography, Window-dressing, Counter, etc. Write F. Waugh, 1 Keighley Road, Colne.

INFLUENTIAL Belgian Pharmacist desires to gain London experience and perfect English, from October to December; will give services free and offers position in his pharmacy to suitable Assistant on return. 154/448, Office of this Paper.

LOCUM; elderly; active; qualified; London and provincial experience; teetotaller; moderate for light post; references. "Chemist," c/o Harris, 7 Upper Russell Street, Brighton.

NAMES AND ADDRESSES.

When sending advertisements for any of the sections in this Supplement, advertisers—as a guarantee of good faith, and not necessarily for publication—should always give their names and addresses. It sometimes occurs that this rule is not followed and delay and disappointment ensues. Strict attention to this detail will be appreciated.

LOCUM; middle age; reliable; well recommended; recently sold own business; liberty after 23rd. "Chemist," c/o Hayes Drug Stores, Hayes, Middlesex.

LOCUM; M.P.S.; elderly; disengaged week August 12-17. J. S. Welburn, c/o Mrs. Crockford, 279 Milkwood Road, Herne Hill, S.E.24.

MANAGER or Assistant; 28; qualified; middle-class business preferred; London or provincial city; free end of August. 53/18, Office of this Paper.

MANAGERSHIP required by energetic man (26, tall) in busy London working-class district preferred; thoroughly experienced all branches; exceptional references; salary £6; abstainer P.C.B. 54/5, Office of this Paper.

MANAGING Assistant, unqualified, Dispensing and Counter experience, photography, successful Prescriber, age 30, desirous of taking Optical work; highest references; Bath or Bristol. 39 St. John's Road, Weston, Bath.

M.P.S., 43, requires permanency; experience in West End, City and Suburban Pharmacies; 10 years one, 5 years another. 53/12, Office of this Paper.

M.P.S., 25, seeks post with high-class London Pharmacy; best all-round experience, including foreign. Purvis, 50 Osborne Terrace, S.W.8.

QUALIFIED, wide experience, requires managerial position; Locum or permanent; disengaged August 10; London preferred. "N.," 8 Carlyle Mansions, The Mall, Church Street, Kensington, W.8.

QUALIFIED, 24, experienced, desires post near Portmadoc; part-time (to suit) preferred; Chemist-Doctor. Dr. Edwards, Ardraeth, Pwllheli.

QUALIFIED as Manager; 26; 7 years' thorough experience in all branches of quick cash business, N.H.I. and Photo; good Salesman, Prescriber, Window-dresser; methodical Stock-keeper; well recommended; energetic; keenly interested in the work; South-West London if possible. 53/2, Office of this Paper.

QUALIFIED; 34; Scot; single; experienced all branches; reliable and energetic; 8 years Manager in London; good references; interview if desired; disengaged; London preferred. Smith, 7 Desswood Place, Aberdeen.

QUALIFIED Manager, married, desires more progressive post; September; 25 years' good all-round experience (including London); South-West England preferred; seaside or large town. "Chemist," 39 Queen Street, Newton Abbot, Devon.

QUALIFIED, 26, well educated, passed F.S.M.C. in Sight Testing, desires good London permanency; Optical connection essential; would invest if necessary; well recommended; free when suited. BM/YYNL, London, W.C.1.

QUALIFIED Chemist, just completed a nine-weeks' locum engagement, desires further appointment; long or short engagements. Fitt, c/o Beaumont, Chemist, Radford, Coventry, till August 18; afterwards 36 St. Stephen's Road, Norwich.

QUALIFIED, 25, seeks situation in Kent; Thanet preferred; excellent references. L. R. Cooper, 31 High Street, Wembley, Middlesex.

QUALIFIED, 26, single, tall, as Manager; experienced all branches; sound references; in or near Liverpool. 5[illegible] Office of this Paper.

QUALIFIED, 27, as Manager; well experienced in every branch; sound references; North London district. Please state salary. 54/33, Office of this Paper.

QUALIFIED, 27, desires post as Manager; Lancashire or Yorkshire preferred; 10½ years' good all-round experience in London and provinces; at present managing in London. 54/24, Office of this Paper.

QUALIFIED Optician, F.S.M.C. (J.C.Q.O.), with 9 years' all-round Retail Pharmacy experience, desires responsible position; tall, energetic and courteous; undeniable references. 55/27, Office of this Paper.

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149 Newington Causeway, LONDON, S.E.1

QUALIFIED, 23, tall, good-class Dispensing, Counter and Photographic experience, at present managing, disengaged soon, requires post as Assistant or Manager; interview within 20 miles London. 54/13, Office of this Paper.

QUALIFIED lady Chemist, with good all-round experience in Dispensing, Counter work and Photographics, desires position in London; capable of taking charge. 54/21, Office of this Paper.

RESPONSIBLE, capable Manager, experienced Chemist, desires management; permanent position of trust wanted, where faithful service would be reciprocated; house residence if possible; fullest investigation desired. 55/16, Office of this Paper.

THOROUGHLY competent Manager or Locum, with wide experience; age 45; height 6 ft.; good appearance and address. "M.P.S.," 69 Milton Road, Waterloo, Liverpool.

YOUNG lady, 20, desires position as Improver in busy class trade; Liverpool or suburbs preferred. 53/11, Office of this Paper.

YOUNG lady desires post; Counter-hand and Book-keeping; experienced; no Dispensing; near Southsea preferred. Write "W.," 102 Oriel Road, Portsmouth.

WHOLESALE.

s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A THOROUGHLY experienced and well qualified Laboratory Manager, now in charge of well-advertised Toilet Preparations Plant, desires change; capable of taking complete control of laboratory or works. P.C.B. 54/7, Office of this Paper.

ADVERTISER, first-class Chemists' connection, London and provinces, desires represent known house, or would accept good side line; commission and part expenses; highest references. "Traveller," 30 Douglas Road, Romford.

AN ambitious, energetic London Traveller is open to represent a well-established firm; experienced and reliable; own car. 5/15, Office of this Paper.

DRUG Traveller open to take up advertised non-clashing Agency; City office available; sound London connection; commission and expenses basis. "Urgent," 53/26, Office of this Paper.

FIRST-CLASS line required; Midlands and Eastern Counties; commission and part expenses, or otherwise; own car; exceptional attention would be paid to a really good line; excellent references. Matthews, 182 Mansfield Road, Nottingham.

GENTLEMAN, with connection, desires a position as Representative in London; drives own car; excellent references; worker. 55/21, Office of this Paper.

MANAGER, M.P.S., aged 25, single, 8 years' sound experience in Retail Pharmacy, would like to represent well-known house; salary, commission and expenses basis; used to car; excellent references; Midlands preferred, but not essential. 55/26, Office of this Paper.

Price lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

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S. E. HACKETT, 23 July Road, Liverpool

QUALIFIED, many years' first-class and varied experience in Wholesale and Retail, open to consider Partnership or responsible position; able organiser and representative. "Y. M. K. A.," 95 High Holborn, London.

REPRESENTATIVE, 28, Public School, keen, energetic, good record, desires represent known house; expenses and commission basis; good connection Chemists and Perfumers, London and Midlands. 53/27, Office of this Paper.

SALESMAN-REPRESENTATIVE, educated, good address, 34, married, sound London connection, 14 years' experience, Drugs, Packed Specialities, Proprietaries, knowledge of propaganda work, Doctors, Chemists, car driver, desires represent known house. "Integrity," P.C.B. 53/33, Office of this Paper.

(COLONIAL, INDIAN AND FOREIGN.)

UNQUALIFIED; 32 years of age; good experience; Paris or French Riviera. Apply 55/3, Office of this Paper.

FOR SALE.

FOR quick sale, Chemist's Old Mahogany Fixtures, Fittings, Soda Fountain, Scales, etc. Apply Mackie (Clerk of the Works), 45 King William Street, E.C.4.

MISCELLANEOUS.

10s. for 60 words; 1s. for every additional 10 words or less, prepaid.

GREAT BARGAINS IN CHEMISTS' SHOP FITTINGS.—Wall Fittings, Counters, Silent Salesmen, Counter Cases, Wall Cases, Perfume Cases and Desks, Dispensing Screens, etc., etc. PERCY R. E. JOSEPHS, 68 Old Street, London, E.C.1. Illustrated Catalogue post free on application. Estimates and sketches free. Telephone: Clerkenwell 0929.

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SHOPFITTINGS.—Chemists requiring Shopfittings and Showcases of quality, backed by 103 years' experience, at to-day's lowest prices, should apply to PHILIP JOSEPHS & SONS, LTD., 90/92 St. John Street, Clerkenwell, London, E.C.1. Telephone: Clerkenwell 2191. "Pharmacy Fitters for over a Century."

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NEST of 21 Drawers, 6 ft. 4 in. x 12 in. x 20 in.; first cheque £3 secures. 47/39, Office of this Paper.

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GOWER, Chemists' Bookseller, 41 Voltaire Road, Clapham, wants Pharmaceutical Books, including B.P., Pharmaceutical Formulas, B.P.C., P.J.F., Optical Books.

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SOME OF THE CONTENTS.

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